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THE JOURNAL
///
OF
PSYCHOLOGICAL MEDICINE
AND
MENTAL PATHOLOGY.

EDITED BY
FORBES WINSLOW, M.D. D.C.L.
LATE PRESIDENT OF THE MEDICAL SOCIETY OF LONDON.

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To Correspondents.

WE have received from Dr. Davey an elaborate reply to Dr. Hitchman's letter. We very much regret that want of space compels us to postpone its publication until our next number.

We beg to acknowledge with thanks the receipt of a set of the "American Journal of Insanity." The Reports, &c., referred to in the letter accompanying the parcel, will be forwarded to the writer by an early steamer.

No. 3 of the "American Psychological Journal" has reached us. Nos. 1 and 2 have not arrived.

We have had to refuse, owing to some gross defect in the postal arrangements between the two countries, two parcels of American reports within the last month, in consequence of the enormous postage demanded. For one parcel, although marked "paid," containing, apparently, three or four reports or pamphlets, the charge for postage was 12s. 6d.! We mention this circumstance, in case our American friends should consider us remiss in not noticing or acknowledging the receipt of these favours. We would suggest, until better arrangements are made at the Post Office, that all parcels of books, &c., should be forwarded to the Editor, under the care of Messrs. Rich, Tavistock-street, Covent-garden, or through the publishing house of Balliere, Broad-way, New York.

Several valuable communications and reviews of works are unavoidably postponed until our next number.

We had marked several valuable articles in the "American Journal of Insanity," and the "Annales Médico-Psychologiques," for reprint. They will appear either in the next or in the succeeding number of this Journal.

We have received Dr. H. Dameron's excellent work entitled, "*Sofeloge eine Wahnsinns-studie*," Halle, 1853; which, with Dr. J. Parigot's able "*Tableau Analytique des Maladies Mentales*," will be reviewed in the April number of this Journal. Dr. Parigot's work did not come to hand until the present number was nearly printed.

THE CONCLUDING
LETTSOMIAN LECTURES,
ON THE
MEDICAL TREATMENT OF INSANITY,
AND ON
MEDICO-LEGAL EVIDENCE IN CASES
OF INSANITY,
BY
FORBES WINSLOW, M.D. D.C.L.,

Will be published in consecutive Numbers of this Journal.

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THE JOURNAL

OF

PSYCHOLOGICAL MEDICINE

AND

MENTAL PATHOLOGY.

JANUARY 1, 1854.

ART. I.—MODERN DEMONOLOGY AND DIVINATION.*

THE association of ideas is manifested in national and social as well as individual habits of thought. There is also from age to age a progressive development of nations and societies which, varying in its successive phases, begins and ends in a like manner in every successive cycle, because it is guided onwards by similar associations of ideas, each linked to its predecessor and developing its successor. It follows, therefore, that the stages of development in the lives of nations as well as of

* M. Tullii Ciceronis Libri de Divinatione et de Fato.

The Course and Tendency of History since the Overthrow of Napoleon I. By Professor G. G. Gervinus.

Contributions to Proleptics ; or, the Science of Prevision. By Thomas Laycock, M.D. (York). *Lancet*, 1841-1843.

The Coming Struggle among the Nations of the Earth ; or, the Political Events of the next Fifteen Years.

The Future of the Human Race ; or, a Great, Glorious, and Peaceful Revolution near at hand, to be effected through the Agency of Departed Spirits, &c. By Robert Owen.

A Review of the Spiritual Manifestations, in which it is attempted to prove that the Spirit-Rappings, &c., are the Work of Evil Spiritual Agents. By the Rev. Charles Beecher (brother of Mrs. Stowe).

Table-Moving Tested, and proved to be the Result of Satanic Agency. By the Rev. N. S. Godfrey, S.C.L., of St. Catherine Hall, Cambridge, and Incumbent of Wortley, near Leeds.

Table-Turning the Devil's Modern Masterpiece. Being the Result of a Course of Experiments. By the Rev. N. S. Godfrey, &c.

Table-Talking. Disclosures of Satanic Wonders and Prophetic Signs. By the Rev. E. Gillson, M.A., Curate of Lyncombe and Widcombe, Bath.

Table-Turning not Diabolical. A Tract for the Times. By the Rev. F. Close, A.M., Incumbent of Cheltenham.

Some Account of the Apparition of the Blessed Virgin at La Salette, in the Diocese of Grenoble, France.

individuals are comparable, and that the history of a deceased body politic may offer lessons of experience to one existent.

We have been led to these considerations by reflection upon the extent to which divination is now prevalent, using that term in the sense of a searching into the unknown present and the future. *Science* has long manifested the glorious characteristic of prescience, and in this, as in every preceding age, we have witnessed examples of foreseeing sagacity the result of mature *experience*. But in addition to these, we have had unusual methods of divination made popular as well with persons of literary attainments and cultivated minds as with the ignorant and superstitious. Clairvoyante youth of both sexes have been used for all those purposes to which divination was formerly applied; and now, more recently, demonology and demoniacal possession have been widely studied and practised. The latter are interesting as a question of psychology, and we propose noticing them the more especially at present; not neglecting, however, those true and natural methods of anticipating the future which are based on philosophy, and therefore exclude the supernatural.

Mesmeric divination will probably be extinguished by this new folly; we need not therefore notice it here.

Mankind has sought in all ages to know its destiny as well in this world as in the next. Every available and conceivable means have been adopted for this purpose,—the most trivial and absurd, the most awful and mysterious. There is no impulse so strong as this instinctive inquiry into the future; none from which more pleasure is derived or by which more anxiety is created. The novel reader is the most familiar illustration of the one, the monomaniac who destroys himself to escape an imaginary future evil is an illustration of the other.

Now what is so general and universal a practice cannot in its nature be wrong. The search into the future may be defended by various arguments, and its propriety and practicability easily established. We might instance our daily experiences, and from the practice on a small scale defend it on the largest. Perhaps, however, the example of the All-wise Artificer of the universe is the most cogent argument in its favour. On every side we see the most manifest and beautiful proofs of that beneficent provision for the future which under the term *Divine Providence*, or foreseeing of and providing for the future, has been recognised as one of the greatest and most lovely attributes of the Deity, and has even become a name for the Deity himself. Looking abroad into the planetary or kosmic creation, we find how nicely balanced in relation to each other are all those mighty masses of matter which sweep through space with such terrific rapidity, and with what a perfection of adaptation to the future do those in more imme-

diate relation to this earth attract and repel it. However certain we may feel as to the future stability of our planetary system, and however confidently we may expect the sun to arise in the morning, yet perfect certainty of the event was only attained in the days of old, after that terrible deluge of waters, by the declaration of God himself. In these later times it has pleased him so to enlighten men's minds that they are more able to comprehend the excellency of his wisdom in the order of his providence. A great and wise king, himself a great naturalist and moral philosopher (and we quote him in deference to the theologians who have entered the field of prescient knowledge), has left on record that the spirit of man is the candle of the Lord. By this "candle" we read that those great globes poised loosely in space, all move in their orbits in the direction most calculated to give them stability; that of all the innumerable arrangements which might have been made, not one could have led to this result more effectually. Laplace, noting this wise provision for the future, has calculated that it is above four millions of millions to one in favour of these motions having been directed by one original or first cause. Certain as we may feel that the sun will rise to-morrow, it is above two million times less probable than the truth of the position that the motions of our system were designed with a distinct reference to their future stability.

Coming to *living* organisms, we again find the example of an admirable foreseeing of and a provision for the future. The student of natural history or of natural theology cannot but be aware of those prospective contrivances for the well-being of living things which encounter him at every step. Long before lungs are required they are ready formed and adapted to future wants; eyes are developed before vision is necessary; ears before hearing; and for many years before it can come into play that most exquisite of all these prospective contrivances, the human brain, is elaborated and made ready for future use.

That which is seen in development, is seen also in the instinctive uses, so soon as the use is necessary, of the machines, instruments, and weapons thus wisely provided beforehand. Philosophers have long recognised the operation of the instinct in lower animals as being something little less than Divine, and perhaps nothing strikes the mind so much as that preparation for the future which marks the instinct for propagation of the species in every kingdom and division of nature, from the highest to the lowest. It is not in the domestic economy of insects only that this admirable regard for the future is manifested, although in these particularly, and the bee and other hymenoptera, it is most curiously shown. The principle pervades the whole series of animated existence, and is the most highly developed in man himself.

The sciences and arts are, in fact, nothing more than the result of

the evolution of the instincts into reason and will. Every one and each has its counterpart in the animal economy. Science is nothing more than the knowledge of the necessary order of events; reason is the faculty which enables us to perceive and know this order; philosophy is the right use of this reason in determining such order. Hence, the greatest philosophers have not failed to perceive that man has a special relation to his Creator, inasmuch as he appears to be the only one of terrestrial beings capable of perceiving the wisdom of the Divine Providence, and of investigating the order of creation. It was when impressed with these ideas that Bacon, in his opening aphorism, declared man to be "the minister and interpreter of nature." So also, long anteriorly to Bacon, Epictetus observed—"God hath introduced man [into creation] as a spectator of Himself and His works; and not only as a spectator, but an interpreter of them." It is specially in his interpretation of God's counsel in the past and the future that man is pre-eminent; to *divine* is most emphatically the true characteristic of man's spiritual nature; to "look before and after" is the very essence of all his faculties; and the knowledge of that future existence for which his present is only the preparation, is the culminating point of his knowledge.

It is not, therefore, a matter of surprise that man, in all ages, in all climes, in every stage of political and social development, should follow the corporeal and intellectual instincts of his nature. In domestic life, in agriculture, and indeed in all arts, in politics, in all sciences, he deseries and prepares for the future. That is the law of his nature; in following that law, under the guidance of sound principles, man fulfils his duty. The search into the future is therefore in itself laudable and necessary; it is only in the mode in which it may be conducted that there can be error or sin.

Two principal methods of investigation have been adopted by mankind in all ages; namely, the natural and the supernatural. The natural was founded first upon observation and experience; then upon science, or general principles. A simple observer of the phenomena of nature is enabled to foresee the recurrence or occurrence of natural phenomena, although wholly devoid of scientific knowledge. Thus the seaman or shepherd knows well the indications of change in the weather; thus also the course of the seasons and of vital phenomena of an obviously periodic character is manifest to simple observation; neither meteorology, nor astronomy, nor physiology is needed. In morals and in politics, long-continued observation is the foundation of that sagacity which foresees the end of a series of events. It is by this that—

"Old experience doth attain
To somewhat of prophetic strain."

The prediction of events by the aid of science has astrology for its basis; that is to say, astrology, in the true sense of the term, as designating the science of the universe. That at a very early period of history mankind had attained to a very accurate knowledge of the system of the universe is rendered very clear by recent historical researches. The ancient Egyptians and Chaldeans knew the exact length of the solar year, and founded several important periods on that knowledge. In fact, they were not only as perfectly acquainted with the great principles of astronomy as the men of the present time, but appear to have had a much deeper insight into *meteorology*. As to the latter, they were both speculative and practical. Speculative to an extent moderns have not ventured, for they marked out great periods of time, within which cycles of changes would be completed of vast extent and importance. The Annus Magnus, or Great Cycle of the Egyptians, consisted of from 300,000 to 360,000 years. This being completed, the whole assemblage of celestial phenomena which are regarded as the influential causes of all changes in the sublunary world being restored to the same initial order, and proceeding in the same catenation as before, the whole series of events that depend upon them follow in their former connexion of place and time. The same individual men are doomed to be born again and perform the same actions as before; the same arts are to be invented, the same cities built and destroyed. This philosophical theory is probably referred to by the author of Ecclesiastes, or the Preacher, who applied his heart "to know, and to search, and to seek out wisdom and the reason of things," when he remarks, "The thing that hath been, it is that which shall be; and that which is done is that which shall be done; and there is no new thing under the sun. Is there anything whereof it may be said, See, this is new? It hath been already of old time which was before us." According to Mr. Cullimore, the Chaldeans represented the origin and destiny of the world as depending upon two grand astral conjunctions, on the occurrence of which, in a peculiar season of the year and point of the heavens, it was fated to perish by a deluge or conflagration. These doctrines were very widely diffused through the whole of the East, and appear to have passed from thence to Greece on the one side and South America on the other, having been traced in the mythology of the Aztecs. But, although our first convictions would lead us to consider these views as entirely speculative, yet as to the astronomical portion of them we are not without some indications of foundation in truth. First, as to the Annus Magnus of 360,000 years, we may remark that, knowing how much the number 7 was used by the ancient astronomers and philosophers, we resolved to try, by way of experiment, what astronomical cycles would produce, if multiplied by 7, an approximation to the

number of years constituting the *Annus Magnus*. Singular to say, the first cycle tried produced the number very nearly. The student of astronomy is well aware of what is termed the precession of the equinoxes; namely, a motion of the equinox on the ecliptic, by which it constantly travels backward or retrogrades, but at such a very slow pace that it requires 25,868 years to complete the tour of the ecliptic. Multiply this number by 7, and the result is 181,076, being the half (or a little more) of the great cycle of 360,000 years. We next looked for an astronomical cycle of which this might be the half, and which might (like the precession of the equinoxes) correspond to the Egyptian and Chaldean speculation. There is one of this kind of a very interesting character. The earth's orbit at present is *elliptical*, but in some far distant age it was *circular*, and in some far distant age it will be circular again; for it is so kept in a continual state of change by the action of the planets on the earth, that its eccentricity is, and has been from the earliest ages, diminishing, and this diminution will continue (there is little reason to doubt) until the eccentricity is annihilated and the earth's orbit becomes a perfect circle; after this it will again open out into an ellipse to a certain moderate amount, the eccentricity will again increase, attain a certain moderate amount, and then again decrease as before. The time required for these evolutions (Sir F. Herschel states), though calculable, has not been calculated farther than to satisfy us that it is not to be reckoned by hundreds or by thousands of years. Now it is by no means improbable that this cycle may be the *Annus Magnus*, as it presents its essential characteristics; namely, recurrence of identical planetary relations. It is a remarkable coincidence that the knowledge of this cyclical change was acquired indirectly through ancient Chaldean records of lunar eclipses. By comparing the times of their occurrence with those of the modern era, Halley discovered that which is known as the secular acceleration of the moon's mean motion. The explanation of this acceleration was a puzzle until Laplace discovered further that it was caused by this cyclical eccentricity of the earth's orbit. It is curious, too, that the *embolismal* period of the Egyptians, of 1440 years—a period during which the twelve months became intercalated in the calendar in succession—is a multiple of the cycle. The Chaldeans used another cycle of interest; namely, the soli-lunar period of 600 years, the square of which makes up the *Annus Magnus*. Now the solar year, which is the unit of this Chaldean period, is exactly 365d. 5h. 51m. 35s. 2th. long; it also contains exactly 7421 lunations, of 29d. 12h. 44m. 2s. 48th.—striking proofs of the refined mathematical as well as astronomical science of that wonderful people. How far they were acquainted with geology we know not; but it cannot but strike the mind that this science corroborates the Chaldean speculations, inasmuch as it distinctly points to the occurrence of vast changes in

the earth's crust as having occurred at long intervals of time, and caused at one time by mighty volcanic agencies, at another by overwhelming irruptions of the ocean on the dry land, or deluges and conflagrations.

We can hardly conclude that these cycles, so far as the history of mankind is concerned, were otherwise than speculative. It is certain, however, that astronomy and meteorology were practically applied to the daily concerns of life by these Chaldean philosophers. This is manifest both from various passages in the Scriptures and in ancient writers, and from the records of Egyptian and Chaldean science, discovered in the ruins of ancient cities in Egypt and Mesopotamia. Many of the inscribed bricks and inscriptions on stone are almanacks, or seem to contain the data for determining the annual inundations. A passage in Isaiah points to a distinct class of scientific men amongst the Chaldeans, whose duty it was to prognosticate. The entire of the 47th chapter indicates the high state of luxury and knowledge attained by the Chaldeans; but the 13th verse runs—

“Let now the astrologers, (or, marginal reading, ‘viewers of the heavens,’) the star-gazers, the monthly prognosticators, (or, in the margin, ‘that give knowledge concerning the months,’) stand up, and save thee from these things that shall come upon thee.”

Cicero, in his ‘Treatise de Divinatione,’ mentions “the auguries not of divine impulse but of human reason, for they predict future nature,—as floods of waters, and at some time a future conflagration of the heaven and the earth.” He also classes with these the advice to the Lacedæmonians of Anaximander, the natural philosopher, who warned them to leave the city and their houses, and go armed into the plain, because an earthquake was imminent; and that forthwith it took place, the whole city was overthrown, and a projecting portion of the hill Taygetus thrown down. Cicero also quotes Pherecydes, the teacher of Pythagoras, as pronouncing an earthquake approaching, from the condition of the water drawn from a well. This natural divination, Cicero further shows, can be attained by a knowledge of the chain of causes,—of why those which are past occurred, why those which are now became, and why those which follow will come. If “mortal man,” he observes, “could comprehend the entire colligation of all causes, he could be deceived in nothing, for if he knew the causes of the future, he would, of necessity, know the future itself.”

There is a regular sequence of events in the life of every living organism, as well as in the starry heavens. The order of this sequence was also specially studied by the Egyptians and Chaldeans. They divided the series of periods into *steps*—hence the *climacteric* periods of life, known and recognised by the Chaldeans, and according to

Aulus Gellius, so named by them; what is more interesting is, that the Druids were as learned as the Chaldeans in these matters. Julius Cæsar, in 'Commentaries de Bello Gallico' [lib. vi. cap. xiv.], says: "These profess to know the size and form of the earth and the world, the motions of the heaven and of the stars, and what the gods will." According to Diodorus Siculus, they studied physiology (*sic*) and ethical philosophy.

But the ancients occupied themselves in that other important branch of prognostics which foresees the origin, progress, and destiny of nations. Cicero mentions this specially as one of the natural auguries, and illustrates it by the example of Solon, who predicted, long before, the rise of despotic government in Athens, just as Napoleon is said to have declared that in thirty years Europe would be either Cossack or Republican—a prediction which might have been verified if the balance of power had not rested with the powerful constitutional monarchy of this kingdom. Now, this natural and philosophical, and therefore true, method has been so corrupted and lost, that it can hardly be recognised amidst the quackeries which have sprung out of it. Astrology, as now practised, is the chief in modern times; the practice of augury was the most frequent in ancient times. These quackeries, however, were so closely mixed up with those of the supernatural class, that they rather belong to it than the former.

The first and only true system of knowledge of the future of the *supernatural* kind is contained in the prophecies of Holy Writ. All others are spurious. It is hardly possible to conceive to what an extent divination, sorcery, magic, and demonology constituted a part of the social system of the ancient nations. Divination was, in truth, a part of their *established religion*. Cicero informs us that the Persian Magi congregated in the temple for the purposes of discussion and mutual instruction, and that no one could be king of Persia who had not been trained in the doctrine and teaching of the Magi. In speaking of the fixed customs, in this respect, of the Athenians, Lacedæmonians, &c., he remarks,—*Omitto nostros qui nihil in bello sine extis agunt, nihil sine auspiciis domi habent*.

We have seen that science and philosophy had their share in the system of prognostics; it must be added, that superstition had more. The ancients relied much on *spiritual* agencies, or on what seemed to them to be such. The greater number of their practices arose out of those curious operations of the nervous system, which in modern times are again betraying man into necromancy, witchcraft, and demonology. The Greek word for a soothsayer or divining priest—*mantis*—is derived from the same root as *mania*. To this day, indeed, in Asia Minor, the idiotic and insane are thought to be inspired.

Such, also, was the case in ancient times; and delirious or clairvoyant girls, known as a Pythian priestess or a sybil, ruled the polity of great, warlike, and learned nations, and accumulated untold wealth. The oracle at Delphi received rich gifts from every quarter of the then civilized world, and had a reputation for truth beyond suspicion. Portents of all kinds, false and true, had their weight; the images of the gods were seen to weep, to perspire, to bleed; were heard to utter warning sounds. Meteors with thoughts of fear affrighted nations, and the occurrence of a fit of epilepsy dissolved important political assemblies. Divination by dreams, or oneiromancy—by departed spirits, or necromancy—by the divining rod, or rhabdomancy—by second sight—by various minor methods, as crystals, a cup—“is not this it in which my lord drinketh, and whereby, indeed, he divineth?” said the Egyptian steward of Joseph—was of ordinary occurrence. Never was the world so given up to a multifarious system of fraud and falsehood as at the Christian era.

When the practice of divination was, apparently, the most firmly established, and when those ideas from which it originated had attained their culminating point in the deification of the Roman emperors, the whole social fabric of the age was nodding to its fall. Ancient civilization had also reached its climax, and the barbarous tribes of the then known world were beginning to press on its confines. Christian civilization seems now to have attained an analogous stage of development. The most ensanguined conqueror of Christendom has the day of his beatification commemorated by a large section of the Christian church; while the despotic ruler of another large section, made up of an agglomeration of barbarous tribes, draws the sword of conquest in the name of religion, and not only claims to be, but is *acknowledged* by millions of Christians to be actually God's vicegerent on earth. In the more civilized nations of the West, dignitaries of one section of the Christian church, and priests of another, stamp with the seal of their authority legendary stories and lying fables, such as emphatically characterized the pagan era; and—worse perhaps than all—men whose education and attainments entitle them to rank with philosophers, corroborate with their authority the superstitious follies of the age.

It may be alleged that our description is overdrawn. It is not so; and to show its accuracy, we will compare briefly the modern with the ancient divination.

The village of La Salette is situated among the mountains, at about four miles from the little town of Corps, which lies below on the high road between Grenoble and Gap. About four miles from the church of La Salette, higher up in the mountains, in the hollow of a ravine which cuts through a table-land bare of trees and rocks, on September 19th,

1846, two little children were watching their cows, the one a boy aged eleven years, the other a girl aged fourteen years. The Blessed Virgin, we are told, selected this time and place to communicate with these children, as "the bearers of a warning message to 'her people,' and to be the depositaries of some mysterious secrets." Shortly after the hour of noon, they saw a "brightness," and a lady in it, who was sitting down with her head in her hands. She spoke to the children. With tears running down her face, she informed them as to various matters touching the present and the future. She reproved the Sabbath labour of the country-folk, and the swearing of the men as they drove their carts; only a few old women went to mass, the rest working during the Sunday all summer; and "during Lent they go like dogs to the butchers' stalls." For these sins she declared there should be no potatoes at Christmas. But we will record the very words of this prophecy.

"The disease shall last; so that this year, at Christmas, there shall be no potatoes at all.

"If you have any corn you need not sow it; all that you shall sow shall be eaten by the animals; or if any does grow up, it shall fall in dust when you thresh it.

"There shall come a great famine.

"Before the coming of the great famine, the children [†]below seven years of age shall have convulsions, and shall die in the arms of those who hold them; the rest shall do penance by hunger.

"The nuts shall become bad; the grapes shall rot.

"If men will be converted, the rocks and stones shall be changed into heaps of corn; and potatoes shall be sown all over the land."

The "lady" then inquired about their prayers, talked a little small-talk, and at last glided away along the tops of the blades of grass.

"Then she looked up to heaven, then down to the earth; then we could not see her head any more; then we could not see her arms; and then we could not see her feet any more. We saw nothing but a brightness in the air, and soon the brightness went away also."

In answer to inquiries how this "lady" was dressed the children replied:

"She had on white shoes, with roses about her shoes. The roses were of all colours. Her socks were yellow; her apron yellow; and her gown white, with pearls all over it. She had a white neckerchief, with roses round it; a high cap, a little bent in front; a crown round her cap, with roses. She had a very small chain, to which was attached a crucifix; on the right were some pincers, on the left a hammer; at the extremities of the cross was another large chain, which fell, like the roses, round her handkerchief. Her face was white and long."

In addition to what we have mentioned, the lady confided to each of

these children a secret which he was not to tell to the other. As to these, they have hitherto maintained an impenetrable silence, excepting in confiding them to the Pope, to whom they were transmitted in 1851.

"During the past year 1851, the children, in the presence of certain persons named by the Bishop of Grenoble, wrote each on a sheet of paper, which was folded and sealed by the writer, the secrets entrusted to them. The Bishop then directed M. Rousselot and another priest to carry these sealed packets to Rome, and deliver them into the hand of the holy father. This was done. His holiness first broke the seal of the one, and read it without making any remark. On perusing the other, he walked with it to the window, and after having read it said: 'It is not only France that has sinned, but Germany, Italy—all Europe!' When M. Rousselot went to take leave of Cardinal Lambruschini, the cardinal said—'I know the secret; the holy father has confided it to me.'"

If these two "augurs" laughed at each other, as their Roman predecessors would have done, the fact is not chronicled.

The water of the fountain became, of course, a means of cure for diseases, and worked many wonderful miracles, both at the spring and when taken to a distance. Innumerable pilgrims visited the scene of the vision. Their feet wore away the herbage, their hands tore up the earth and morsels of stone; fourteen crosses were erected along the line which "the lady" traversed; they were hacked and cut daily by the "faithful," 60,000 of whom ascended the mountain in one day.

Official cognizance was taken of the whole affair. Ecclesiastics of rank visited the "holy mountain;" amongst the rest the present Bishop of Orleans, M. Dupanloup, who could not refrain from saying to himself continually, "It cannot be but that the finger of God is here!" but who, however, frankly acknowledges that both the children were very disagreeable, vulgar, and habitually rude (the boy, we are also told, was an habitual liar), reciting their story like a lesson, and very guarded in what they said about it. The credulous (?) bishop gives us the outlines of the cross-examinations to which he subjected them, and examples of questions put to them. We find that the questioners did not hesitate to tell them lies, so as to entrap them; as, for example, that the Virgin had told the secrets which she had confided to them to a "holy nun;" that the Pope was "greater" than the Blessed Virgin, &c. When it was hinted to them that their visitor might have been the devil, they promptly replied, "But the devil does not wear a cross!"

The visionary tales of these children have been widely spread, and as widely credited by "Catholics." Churches are being built in various countries in honour of Our Lady of Salette, and even a confraternity is established in England bearing her name. The cures she has wrought

are as numerous and as well authenticated as those of the most popular quack medicine, the testifiers being *bishops* of the Roman church.

The parallel to this history is not wanting in pagan religious history; such visions were by no means uncommon, so that the difficulty is rather in the selection. That which gave origin to the established religion and priests of ancient Italy, namely, augurs and divination by auguries—a religion which governed the entire polity of ancient Rome—is, perhaps, the most interesting to us. Cicero gives us the particulars:—

“It is said that a certain Tages started suddenly from the earth, as the ground of a Tarquinian field was being ploughed, and a deeper furrow than usual made, and addressed the bullock-driver. This Tages, as is stated in the books of the Etruscans, appeared in form to be a boy, but in wisdom was an old man. The bullock-driver, being astonished at his appearance, raised a loud cry of astonishment, and a concourse of the people being thus excited, in a short time the whole population of Etruria assembled on the spot; that he then said many things to numerous hearers, who listened to his words and committed them to writing; that, further, this address comprised the science of divination, and that it has been added to by new knowledge based on the same principles. This science we have received from these persons; these writings are preserved; this is the source of the science. Now is there anyone, I will ask, so silly as to think that there was ploughed out either a god or a man? If a god, why should he, contrary to his nature, hide in the earth, so that when exposed by the plough he might behold the light? Why, indeed, could not this same god communicate science to men from a loftier spot? But if this Tages was a man, how could he live covered over with earth? or where could he have learnt that which he taught to others?”

“But,” Cicero significantly adds, “I should indeed be more foolish than they who credit these things if I seriously argue the matter.” Equally absurd would it be to attempt to demonstrate, in reference to “Our Lady of Salette” what is obvious enough to any but the most obtuse understandings.

The portents of the bleeding picture of Rimini, and the perspiring and the weeping statues of the saints elsewhere in Italy, have equally their pagan parallels; nothing seems changed. It is recorded that at the commencement of the Massican war the images of the gods perspired, blood flowed in a river and rained from heaven, mysterious voices were heard, &c., &c. These follies Cicero ably combats in terms perfectly applicable to similar modern portents. That the augurs deliberately practised deception is certain, both from various facts and from antiquarian researches. The sacrifice of an ox in which the augurs could find no heart, is an anatomical portent closely parallel to that well-known Roman-catholic portent, the liquefaction of the blood of St. Januarius.

The populace of the ancient Italian and Grecian cities were excusably credulous, for they were almost wholly uneducated. A great proportion were enslaved; and it was then (as now in the slave-holding states of North America) a capital crime to teach a slave. Natural history and physiology were so little advanced, that even the educated had no aid from science in the detection of the frauds of the priesthood, or in the explanation of those natural phenomena to which the expounders of the established religion gave a portentous and religious character. The established faith on these points was also as intolerant then as now: for it is on record that Anaximander was condemned to death for impiety, which consisted in referring to natural causes the so-called auguries. In modern days the populace are as uninstructed as in the ancient in that knowledge which would dispel their superstitious terror, and prevent them being the dupes of religious frauds; they are therefore excusable also. But what shall we say of the priesthood and educated laity of the Roman-catholic church from the Pope and Prince downwards, who not only wink at, but expressly sanction, multitudinous fables like that of Our Lady of Salette?

The representative faculty of man has ever and in all times strangely clothed in visible forms that fundamental idea of the spiritual and invisible which is inherent in his nature. In the imaginative south the material representations have little changed as to the form and substance; only the name and a few non-essential characteristics have been modified. In the more metaphysical north, ideas of spiritual agency of a gloomy character have been predominant, as with the ancient Hebrews, the Etruscans, the Chaldeans, and the races of the east. The representation of the instincts and emotions has in the sunny south developed itself in the various forms of love, especially the physical and maternal; in the north, the sterner instincts and feelings have predominated. Be this as it may, demonology, necromancy, and witchcraft, although not by any means exclusively the pursuits of the races just mentioned, are less modified by the beautiful and the pleasurable than in Greece and Italy. The popular taste for table-turning, spirit-rapping, and demonological researches, is only another manifestation of that series of ideas which two or three centuries ago took the form of witch-finding; which anteriorly to that age occupied the clergy in exorcisms with bell, book, and candle; and which in the ancient nations of the east led to the theory of demoniacal possession, and raised up the profession of exorcists. Egyptian, Assyrian, Etruscan, Grecian, and Roman literature and remains sufficiently show how widely the doctrines of demons, and of a spiritual being powerful only for evil, influenced the mythology, religious ceremonies, and acts of those people. The term demon amongst the Greeks, at least, did not necessarily imply an *evil* spiritual being, as it appears to have implied amongst the Jews.

With both, however, persons affected with epilepsy or epileptic-like diseases, were thought to be possessed by 'demons.' Hence the term *morbus sacer*, as applied to it; and hence the term comitial disease amongst the Romans, with whom it was a law that if a person were attacked with epilepsy during a meeting of the freemen, it was forthwith dissolved. In the Hippocratic writings, a little essay on the Sacred Disease gives us an interesting glimpse into the philosophy and popular superstition of the day. The writer, describing the practices of the professional exorcists of the age, remarks—

"If they [the epileptic] imitate a goat, or grind their teeth, or if their right side be convulsed, they [the exorcists] say that the mother of the gods is the cause. But if they speak in a sharper and more intense tone, they liken this state to the horse, and say that Posidon [Neptune] is the cause. Or if any excrement be passed, which is often the case owing to the violence of the disease, the appellation of Enodius [Hecate?] is given; or, if it be passed in smaller and denser masses like birds', it is said to be from Apollo Nomius. But if foam be emitted by the mouth, and the patient kick with his feet, Ares [Mars] gets the blame. But terrors which happen during the night, and fever, and delirium, and jumpings out of bed, and frightful apparitions, and fleeing away—all these they hold to be the plots of Hecate [the queen of Hades] and the invasions of the heroes [daimons], and use purifications and incantations," &c. &c.

The casting out or exorcism of these daimons was amongst the Jews also an ordinary practice, as is evident from texts in the Holy Scriptures, both old and new. Allied to this notion of spirit possession, was that of having a "familiar" spirit, or a spirit of prophecy, at command, a "python," &c. The persons possessed by a spirit of prophecy were generally females; they suffered from diseases of the nervous system, especially somnambulism, catalepsy or trance, and hysterical delirium. They were used by their masters for the purposes of gain, as has been done only very recently by the masters of clairvoyante girls in this country, on the Continent, and in the United States. As respects these, indeed, the analogy is complete; as respects the devil and departed spirits, it is a fortunate thing for the admirers of spirit-rapping and table-turning that the analogy is not complete, and inanimate wood is possessed by them rather than living men and women.

Our demonological sketches might be much extended, but this short introduction will help us to understand the modern development of this folly, as it is set forth by a certain reverend divine of the Church of England, with whom we must in justice associate another erring brother, the Reverend E. Gillson, of Bath. This gentleman has largely helped in developing "the very strange excitement, and the very sinful practices" which the publication of the Satanic theory of table-

turning has caused in Bath. As Mr. Godfrey is, however, primarily and more directly identified with the "Satanic theory," we limit our notice to his little publication. Mr. Godfrey takes his stand upon "God's Word," that is to say, upon the facts recorded in Holy Writ. By collating these facts and the various doctrines of Satanic agency scattered through the inspired volume, Mr. Godfrey satisfactorily (to himself) proves that the ancient Egyptian magi (or natural philosophers) were enchanterers in the true sense of the term, that is to say, that the magic whereby they imitated the miracles of Moses was not a natural magic, such as is practised in modern times by the professed conjurers, whether European, African, or Asiatic, but a supernatural. This supernatural agency was spiritual; being not of God it was opposed to God, "and as the only supernatural agency *opposed* to God is the Satanic, we say, therefore, *they* [the enchantments] were performed by Satanic agency." This is an example—the first we meet with—of Mr. Godfrey's mode of argument. He quotes Balaam (a magos) as another enchanter; also the witch of Endor (a necromancer), who, according to Mr. Godfrey's own showing, was identical in her character with the damsel having the spirit of divination, mentioned in the Acts (xvi. 16), "which brought her master much gain by soothsaying," and this identical damsel, who had a spirit of Python, leads to the Pythoness proper of Greece, who was a ventriloquist like the Endor dame. Having identified the three as being similar, Mr. Godfrey comes to the conclusion—not that the Greek Pythoness was an impostor—but really inspired by Satan!

This perversion of intellect is so characteristic of this whole class, and is itself so interesting a fact in the psychology of these follies, that we quote Mr. Godfrey's own views:—

"We have thus, therefore, a clear connexion established between the Python of the heathen oracles, the witch of Endor, and the 'damsel' in the Acts. From the witch of Endor we learn that the Hebrew OHV [*sic*] is rendered by *εγγαστρίμυθος*, or 'speaking out of the belly.' From the history of the heathen oracles, we learn that the Python or Pythoness was called by that name used in the Septuagint, because she spoke from the belly; and from Acts we find that the spirit of Python was an evil spirit, which Paul commanded, in the name of Christ, to come out, and which at his command 'came out at the same hour.' In all these, therefore, we can clearly trace the existence of a supernatural agency; that agency is, by inspired writ, evil spirits. Satan is the prince of the evil spirits, and therefore this agency is Satanic. I am not about to speak of mesmerism, else I conceive I have all the ground-work prepared to show that mesmerism is similar to this, and that by whatever agency the one was effected, the other is, inasmuch as the results are almost identical; and that if evil spirits were the hidden actors in ancient divination, so are they in modern mesmerism."

There are those who have attempted to explain the phenomena which Mr. Godfrey holds to be of Satanic origin, by investigation of the modes of action of the nervous system, and of the phenomena themselves, considered as physical phenomena. That attempt has succeeded. Mr. Godfrey, however, is no child in the use of the well-worn weapons of theological controversy. He first identifies his absurdities with the great truths of Christianity; then he places the origin of these truths, and therewith his absurdities, "beyond the limit even of philosophic imagination." They "can be realized by faith alone; and in such an investigation, the little child, taught by God the Holy Ghost, is far wiser than the grey-haired philosopher, in whose brain is accumulated the wisdom of ages." He hesitates not for a moment to assert, by implication, that he is such a simple man so inspired; or that, in relation to modern philosophers, he is like Paul preaching to the philosophical Athenians. Daily experience, in his view, establishes "the fact that many thinking minds—minds of undoubted power and talent—are, for all practical purposes, *infidel*"—the infidelity apparently being a disbelief in Mr. Godfrey's demonology. Reason, of course, is out of the question; reason is therefore "the word with which the devil baits his snares, which he sets to catch souls." Science must stop on the borders of the natural, which borders Mr. Godfrey undertakes to fix, and hand over to faith (*id est*, to his wandering imagination) the investigation of the supernatural. And so Mr. Godfrey—helpless man, with his philosophical faith, proceeds to exercise *his* reason with *experimental* researches into the philosophy of the supernatural.

We do not propose to follow Mr. Godfrey through these researches: it would be only to waste our readers' time, and occupy valuable space needlessly. Mr. Godfrey, prostrate on the floor, beside the alphabet-board of his national school, ready to spell at the devil's dictation, is only a subject for the satirist, and to which a Molière is the man to do justice. His curate seems to have aided him; also his wife, maid-servant, divers "ladies," &c. He examines and cross-examines the "evil spirit," who answers his questions affirmatively, by lifting a table-leg; negatively, by remaining still. These are examples of the sort of questions put, and the answers given:—

"Are you an evil spirit?—Yes.

"Are madmen possessed by devils?—Yes.

"Is epilepsy possessive?—Yes.

"Are you the spirit of a dead person?—Yes.

"Have you power to come into and to leave this table?—Yes.

"Does the devil send you here?—Yes (emphatically).

"Does he send you for the purpose of deceiving us?—Yes (very decidedly).

"Should you like to come again?—Yes (emphatically).

"Will you come again, if I summon you in God's name?—Yes."

These are some of the questions put, and the contradictory answers given, by this supposed spirit of a table. The "spirits" were, of course, successfully exorcised in the name of Jesus by this weak-minded man, who, imitating Christ, commanded them, in his name, to "quit the table"! What is very singular is, that the spirit being by its own confession an inveterate liar, what was stated was unhesitatingly believed, when it spoke of the spirit world, of Satan, of the palsied, insane, and epileptic as being possessed.

It is proverbial that the devil can quote scripture, but Mr. Godfr. undertakes to make him *prove* what he thinks scripture. It is very well known, and beyond doubt, that *some* of the cases, at least, of demoniacal possession described in the New Testament were simply cases of epilepsy and insanity. This Mr. Godfrey evidently feels to be a weak point in his demonological system, and he justifies it thus:—

"On being asked whether the unclean spirits ever entered into any one, he knocked an affirmative; and when asked, 'Into whom? What diseases were possessive?' he spelt 'MADMEN,' 'FALLING SICKNESS' (or epilepsy), 'Palsy,' 'Murder.' We also learned from him that there were good angels, that he could see them," &c.

Mr. Godfrey gives his "explanation" of the phenomena, that is to say, the deductions which he has drawn from his experimental researches. This effort of his "reason" is as follows:—

"The placing the hands on the table is a sort of incantation. By it the sitters signify their wish to be brought into communication with the spirit-world. They sit until they are observed by some one of the 'wandering spirits,' who thereupon enters the table, making it crack at the moment of its entering in. The reason why it will not obey any commands, *unless hands are placed on*, has suggested an idea which, if it be true, is a very solemn one. It occurred to me, while writing, that the table 'moved simply by the laying on of hands.' L. H. (before referred to) says: 'This moral nothing . . . *on the imposition of your hands* BEGINS TO LIVE!' Can it be that this is the beginning of Satan's last struggle, that *on the imposition of hands*, the table is endued with power *from the devil*, as the Lord's servants, *on the imposition of hands*, were, *in the Apostles' days*, endued with power *from on high*? I merely ask, Can it be?"

The hint, that "this is the beginning of Satan's last struggle," points to the idea which in fact overlays all others in the mind of Mr. Godfrey and his disciples. It is, that the predicted days are at hand when Satan will make his "last grand effort to overthrow Christ's kingdom," days "to which the eye of every student of prophecy is directed." He adds:

"I am now firmly convinced that table-moving is a Satanic device; these various manifestations indicate that the enemy is growing bolder; the bolder he becomes, the more open will be his miracles; the more

open his miracles, the closer our proximity to the development of the antichrist, ruling by Satanic possession and power. And, oh ! if the tribulation of those days shall be of so awful a character, as it shall be, 'that except those days should be shortened, no flesh should be saved,' " &c.

We have seen that tens of thousands gave full credence to the legend of Our Lady of Salette ; so it is with this delusion of spirit-rapping and table-talking. The excitement in the United States has been so great that numerous cases of insanity have resulted. One writer on this subject (Thomas Henry Spicer) states that there are not fewer than thirty thousand recognised *media*, or persons having, in biblical phrase, familiar spirits, in various parts of the United States. In the city of Philadelphia alone it is asserted that there are no fewer than three hundred magnetic circles, holding regular meetings, and receiving communications—circles composed of members of highly respectable families. The Rev. W. C. Magee has published a sermon which he preached at the Octagon Chapel, Bath, with the view of arresting the increasing excitement on the subject in that city.* The Rev. F. Close also beats the "drum ecclesiastie" at Cheltenham in his "Table-turning not Diabolical," a tract less sensibly written than Mr. Magee's. Mr. Close remarks that—

"Those who have watched the bias and tendency of the minds of spiritual people during the last twenty years, will be prepared to expect that anything of the wonderful or mysterious will be readily received as supernatural and miraculous. The character of a large portion of our popular religious literature during the period referred to, whether issuing from the High Church or Low Church press, has had a tendency to create a morbid expectation of wonders ; undefined and ardent speculation has been created ; a disposition to catch at every trifling event as the fulfilment of some prophecy, according to the private interpretation of some popular SEER !" &c.

All this is true ; but it is not true that "philosophical and scientific persons," and they who are "deeply read in the well ascertained facts of experimental and practical philosophy," are "specially prone to scepticism," as Mr. Close asserts. It would be well, indeed, if the spiritual guides of the people were themselves better taught in the laws of inductive philosophy, and especially in experimental and practical research into the physiology of the nervous system. Public decency would then be less frequently outraged, and less scandal and shame brought on the doctrines and example of our Blessed Saviour. As matters are going on, there is indeed great reason to fear that a wide torrent of infidelity and scepticism will sweep over Christendom.

We have one more illustration to adduce of this strange tendency, in

* Talking to Tables a Great Folly or a Great Sin ; being the substance of a Sermon. By the Rev. W. C. Magee. Fifth Edition.

modern times, to divination, and then we have done. From a very early period dreams have had a prophetic character attributed to them, and ONEIROMANCY has ever been an important branch of divination. Perhaps Holy Writ presents us with the greater number of illustrations of this practice amongst the Egyptians, Chaldeans, and Jews. It is obvious that the interpretation of dreams entered into the natural philosophy of those nations, and was a branch of learned inquiry. Physiologically it was allied to somnambulism and clairvoyance, the latter being only dreaming under another form. Technically, however, it constituted the "seeing of visions." It is now well known to those acquainted with the physiology of the nervous system, that dreams and visions are but the results of cerebral action, modified by the action of sleep; that they are thoughts presented to a consciousness from which the external world is shut out; and that, for this very reason, they are often *accurate* thoughts, and constitute *correct deductions* as to the past, the present, and the future. It is the nature of dreaming, however, that thoughts thus presented to the mind do not appear as thoughts, but as occurrences and realities; so that an anticipation of a future event, presented to the mind as a dream, appears to the dreamer as if it were occurring. In this way dreams may be, and undoubtedly are, occasionally prophetic, so that oneiromancy is not a method of divination altogether devoid of foundation, and thus the magi may occasionally have given a successful interpretation to a dream.

The prophet Daniel was a magos or philosopher of high rank in the Chaldean hierarchy. He had, moreover, the knowledge of the true God, and was a religious man in practice as well as theory. He "had understanding in all visions and dreams." On the occasion of his discovery of Nebuchadnezzar's dream, he was made "chief of the governors over all the wise men of Babylon," or "master of the magicians, astrologers, Chaldeans, and soothsayers;" and was doubtless highly accomplished in literature and philosophy, being "skilful in all wisdom, and cunning in all knowledge, and understanding science." That he was also an eminent politician may be inferred from the fact, that of the presidents appointed by Darius over the hundred and twenty princes of the kingdom, he was the chief or the prime minister. The visions of Daniel, Ezekiel, and St. John are wonderful prophetic records, in whatever way we view them. It is just now a favourite pursuit of enthusiastic clergymen and pious laymen to guess at the events predicted, and especially to apply the predictions to the present times. Amongst these is a greater oneiromancer than Daniel, and that one is the author of the "Coming Struggle," for he professes to interpret with absolute accuracy the visions of these prophetic seers.

The author of the "Coming Struggle" is a political prophet; and

the gist of his prophecies is that—1. The Emperor of Russia will seize Constantinople, and overthrow Turkey. 2. That France will overthrow Austria, and annex its territory, and that with Austria the Papal power will fall. 3. That when the continent of Europe is thus weakened by war, the Emperor of Russia will extend his empire over it, and the huge image, which was the great idea in Nebuchadnezzar's dream, will be complete in the subjection of the territories comprised in the Babylonian, Persian, Grecian, and Roman empires to one man. Britain will, however, escape, and rapidly extend her Eastern empire, and include in it Egypt, Syria, and Palestine, the latter being colonized by Jews. War then breaks out between Great Britain and the Russian Emperor; the United States come to the assistance of the Anglo-Saxons. The countless myriads of Europe under the Russian banner are assembled beneath the walls of Jerusalem in battle array; opposed to them are the battalions of the United Anglo-Saxons intermingled with the Jews, and all is ready. The finale is the Battle of Armageddon, which we give in the writer's words:—

“That awful pause which takes place before the shock of battle, reigns around; but, ere it is broken by the clash of meeting arms, and while yet the contending parties are at a little distance from each other, a strange sound is heard overhead. The time for the visible manifestation of God's vengeance has arrived, his fury has come up in his face, and he calls for a sword against Gog; throughout all the mountains 'tis the voice of the Lord that breaks the solemn stillness, and startles the assembled hosts. The scene that follows baffles description. Amid earthquakes and showers of fire the bewildered and maddened armies of the Autocrat rush, sword in hand, against each other, while the Israelites and their Anglo-Saxon friends gaze on the spectacle with amazement and consternation. It does not appear that they will even lift their hand against that foe which they had come so far to meet,” &c.

The fact being that the “foe” meets the fate of the Kilkenny cats.

We remember something like this in Homer's *Iliad*:—

“Then Jove from Ida's top his horror spreads;
The clouds burst dreadful o'er the Grecian heads;
Thick lightnings flash; the muttering thunder rolls;
Their strength he withers, and unmans their souls;
Before his wrath the trembling hosts retire,
The god in terrors, and the skies on fire.”

After the battle comes the millennium, as a matter of course.

It is instructive to note with what a calm conviction of superior knowledge the author of this exposition sets aside the interpretations of “the authorized interpreters of God's revelations.” “Dr. Thomas, of America, was the first to find the key,” however; the expositor takes that key and unlocks the sacred record.

This brief outline of the psychological position of the public mind

must suffice for the present. Our space will not allow us to go into a detailed comparison of the present stage of national mental development with the past stages of nations extinct, however instructive it might be. The well-read student in history will not have much difficulty in drawing the parallel for himself; and the drawing of that parallel will teach him that we have fallen on stirring times.

That we have fallen on stirring times is the conclusion of Gervinus, not from prophecy, but from the philosophical inductions of history. The "Introduction to the History of the Nineteenth Century" has caused unusual excitement in Germany, partly because the author has a high reputation as a philosophical and far-seeing historian amongst his countrymen, partly because his philosophical "Exposition of the Course and Tendency of History" has subjected him to criminal prosecution by the government, of which his views were thought to be subversive. The work referred to is an illustration of the inductive method of foretelling the future of nations, just as Dr. Laycock's "Contributions to Proleptics" illustrate the inductive method of prognosticating the future of individuals and successive generations of men. The one weighs the developing force of ideas and the course of psychological development; the other, the force of periodic external agencies and the course of corporeal development. Both are direct and striking contrasts with the methods of divination by means of the SUPERNATURAL, which we have cursorily noticed. Gervinus notes the thunder-cloud of Russian aggression in the East, as well as the author of the "Coming Struggle," but he anticipates no battle of Armageddon, or the appearance in the field of supernatural combatants. He observes, as to Russian power:—

"Thus, as if the progress of freedom were destined to be guarded from all superficial haste, we are to all appearance more imminently than ever threatened with an universal empire, the fetter of civilization and freedom, no longer from the Catholic-Romanic nations, which are more and more being infected by the spirit of the Teutonic race, but from the Greek-Slavonic element, which, as to refinement and religion, is hostilely disposed against the centre and west of Europe. This Greek-Slavonic element consists of rude masses, dwelling in inhospitable regions, which rather suggest leaving than settling; of masses manageable in the hands of a despot and conqueror, and united by one creed, whose sole head, the Czar, is in possession of all the secular and spiritual powers; that formidable union which has been so eagerly coveted by those monarchs who aimed at establishing an universal empire in the west of Europe. What causes the danger to be still more alarming is, that the feelings of antagonism against Europe—of being one great community—of having an historical mission to regenerate over-refined society—are being fostered in the Slavonic races by a Pan-Slavonic literature and policy, which circumstances

threaten to give to the collision of two opposite political principles, the character, at the same time, of a great struggle of races."

Powerful as are the autocratic and repressive forces in Europe, the democratic and expansive are greater. What Napoleon could not effect with civilized France at his back, will not be effected by Nicholas with uncivilized Russia at his. The former are dynasties only, and are already reduced to the defensive; but in history the only effective agents are those which act on the offensive. Opposed to them offensively "stand the nations in their tenacious and never-ceasing life, and the progressive spirit of history, which, without alliances, unites the nations in acting towards one end, and whose instruments are the powerful impulses of enormous masses who have no need for haste, to whom the moment has often proved fatal, but time will ever be a faithful ally."

To us, as psychologists, the future is not so hopeful. The reiterated attempts at divination by means of the supernatural indicates a stage of social development not favourable to sound religion and morals. Thus far we certainly agree with Mr. Close, who remarks—"that wonders were more frequently wrought when the revelation of God was called in question, and the worship and truth of God had been suffered to decay." In every age of the historical era—alike in the Egyptian, Assyrian, Grecian, and Roman—we find that "wonders" were the means by which the priesthood influenced the people. Pious frauds and erroneous views of the deity were always associated, and when the culminating stage arrived, marked by the utter decay of the worship and truth of God, society fell by its inherent weakness. Fraud and falsehood in matters of religion are the dry-rot of society; they canker and destroy every virtue; they extinguish all vitality. It is this which is the cardinal danger of the age, for, as Gervinus truly remarks, "universal empires do not prosper but on the ruins of decayed states, and after a complete exhaustion of the vitality of nations." The dominion of pious frauds is being established on the continent of Europe; that dominion can only rest on an *unreasoning* submission of the intellect to the priesthood; an unreasoning submission can only spring out of ignorance and superstition, and maintained by bending or breaking down all those national and social energies which the spirit of self-reliance and independence of thought fosters. A people so beat down and broken is a ready prey for the spoiler.

We will only say of the Godfreys, Beechers, &c., who would inexplicably commingle the evidences of Christianity with their visionary notions, that if Christianity have no better support than men and facts like these, it must undergo the fate of the other religious systems that have preceded it, to the end that truth may arise once more in its purity. Christian *philosophy* may, however, redeem the age from destruction, and we think

that already the signs of a brighter day are dawning. In particular, a more general knowledge of physiology, and the philosophical mode of treating history on the one hand, and the increasing cultivation of meteorology on the other, give promise that a natural method of divination is arising, side by side with the supernatural. Which shall stamp its character on the age? Assyrian and Egyptian theology and philosophy were supported by fraud and superstition; they ended in the grossest ignorance and idolatry, and in the destruction of the national existence; and, as we have remarked, never was the world more given up to a multifarious system of religious fraud and falsehood than at the Christian era; the pretended supernatural was the sole basis of the established religion; it perished, consequently, by its inherent falsehood. Cato declared that he wondered how two members of the college of augurs could look each other in the face without laughing; and Cicero writ the unanswerable quiz of the whole system to which we have referred. It lived on, it is true, in a more modern dress, cherished by the ignorance and superstition of the middle ages; but this is noticeable, that nothing good, beneficial, or great—nothing, indeed, of any practical use whatever, has arisen from it.

Shall we then, in this, the middle of the 19th century of the Christian era, hamper and corrupt religion with this useless and most unprofitable system of divination and imposture—again establish “pious” frauds—again practise necromancy in the form of spirit-rappings—again profess to call demons and spirits from the vasty deep, to knock a table about—again link philosophy to the grossest fables and to wilful deceptions—again look for a thief or a lover, or a departed friend, in a magic crystal—again ask from a modern Pythian priestess, in the form of a clairvoyante girl, as to the fate of our lost heroes, or seek, by the aid of a modern sybil, to reveal the secrets of the charnel-house, and penetrate into the past not less than the future? Surely, when we consider how much the natural systems have left us amidst the wreck of ages, and how much may be attained by a diligent use and study of those systems, the age will not be tempted to abandon the safe and sure, although laborious, ways of experience and induction, for the more seductive paths of unbridled imagination and unhallowed moral influence.

Our readers will easily gather, from the foregoing remarks, that there is real danger to Christianity in the cultivation of the ideas which we have reviewed. If this be granted, then it is incumbent on the educated and more sober-minded of the clergy and laity of Christendom—not of one sect or section, but of the entire body—to stand forward and vigorously clear away from Christian doctrines and worship these Pagan doctrines of apparitions and demons.

ART. II.—ELEMENTS OF PSYCHOLOGICAL MEDICINE.*

AN Introduction to the study of Medical Psychology, edited upon the plan of Tennemann's "Manual of the History of Philosophy," is much wanted; we therefore hailed with satisfaction the announcement of Mr. Noble's work, and were induced to regard it as a good sign, indicating the progress of a science which admits of being taught in an elementary form—but we have been disappointed; the book of Mr. Noble does not supply the *desideratum* which exists; and we are moreover bound, in all fairness, to make known that its contents do not correspond with its title-page.

In the high courts of literary criticism, it has always been esteemed a grave offence to put forth any book under a fictitious title; for observe the result! Allured by an attractive title-page, the scholar in pursuit of knowledge orders a copy of the work from his bookseller; it is sent to him, and when too late, he discovers that it is not what he expected. He finds himself in the position of a country cousin, who, upon visiting London, allows himself to be seduced by a gaseonading bill of the play into a theatre, where the performance disappoints him; and, we believe, in neither case, according to the law of the Medes and Persians, is there ever any money returned at the doors. Upon this lax principle, we have heard of fashionable publishers occasionally ordering books to be written up to the title—*ce n'est que le premier pas qui coute*—and, unfortunately, the title-page of a book is often its sole recommendation. Speaking generally, men of science, we believe, are obliged to sail a little nearer to the wind. We do not expect to find, under the title of Elements of Mineralogy, speculations on geology, nor under the superscription of Elements of Psychological Medicine did we expect to meet with a series of commonplace lectures on the nature and treatment of insanity. But of this anon! When such books as the present have come before us, we have often wondered what evil genius prompted some men to become authors. It would be a curious revelation, if it were possible, by any psychological analysis, to arrive at the real motives which urge some men to that species of moral suicide, which at once destroys that reputation for learning and ability, which the good-natured over-credulous world is almost ever ready to award to persons who look wise and maintain prudential silence. The portentous shake of Lord Burleigh's head, in

* Elements of Psychological Medicine: an Introduction to the Practical Study of Insanity. Adapted for Students and Junior Practitioners. By Daniel Noble, F.R.C.S., Medical Officer to the Clifton Hall Retreat, and Lecturer on Psychological Medicine at the Chatham-street School of Medicine, Manchester. London: John Churchill. 1853.

"The Critic," carries with it a world of wisdom—it is a fine moral lesson! We can understand an enthusiastic and youthful dramatic poet—snubbed by Garrick in the green-room, and Curl at his office door—rushing into the street, manuscript in hand, exclaiming, "'Sdeath! I'll print it, and shame the fools!" We can enjoy the sly satire of the noble poet.

" 'Tis pleasant, sure, to see one's name in print;
A book's a book, although there's nothing in't;
Not that a *title's* sounding *charm* can save
Or scrawl or scribbler from an equal grave."

We can make every allowance, too, for the foolish vanity which induces some men of imaginary genius to imitate the example of Pygmalion, and fall down in admiration before the creation of their own hands—but why a well-to-do steady-going medical practitioner should step out of his path to make himself conspicuous as an author, when he has nothing new to say on any subject, is to us an inexplicable enigma. The excuse of having been constrained to publish, at the urgent request of many friends, we had supposed an exploded joke; almost as absurd is the apologetic plea set forth in the preface of the volume before us, that it contains the *bonâ fide* substance of a course of lectures delivered at a Neo-Platonic School of Medicine in one of the back streets of Manchester. We see, in plain English, no reason for the publication of a work which does not approach the void in medical literature which it pretends to fill; for instead of being an Introduction to the study of Medical Psychology—or Psychological Medicine (we are indifferent how the words are played upon)—we find the volume split into eight lectures, presenting us with nothing more than a flimsy elementary treatise upon insanity, unworthy of any place upon a shelf near Prichard, Burrows, Morrison, Haslam, Arnold, to say nothing of Esquirol, Pinel, Brierre de Boismont, Georget, and a host of authors upon cerebral and mental diseases, which are at the command of every well educated student. We do not speak with more severity than the occasion warrants—nay, Mr. Noble himself assumes in his preface a tone of such marvellous self-complacency, that we need feel little compunction in taking him to task; he tells us plainly, that if his book fail to realize his little expectations, he may feel "a little disappointment, but certainly no mortification." The soothsayer, it will be remembered, when wounded in the Temple of Apollo, drew the arrow from his side, declaring that it would enable him ever afterwards to deliver oracles. We have, therefore, no scruple in dealing very candidly with so amiable and so self-willing a martyr.

We have declared—and the charge is a serious one—that Mr. Noble's book is not what it professes to be; and in proof of our assertion we now quote the following passage from the preface.

“The author’s design, in the present work, has been to treat only of what is commonly understood by insanity, or mental derangement—the condition, in fact, so recognised by law and custom—in such a manner as to introduce the topic in a scientific form to those who have previously given it no special consideration.” (p. xiii.)

Why not fairly, therefore, give the book a title corresponding with this design? The title-page, as it stands, has, we have reason to know, deceived many persons, who naturally expected to find the elements of Psychological Medicine here set forth in a way somewhat similar, perhaps, to that which has been so well accomplished by Feuchtersleben, in his Principles of Medical Psychology. The substantive words Psychology and Insanity are clearly not synonymes; in point of fact, medical psychology embraces a much wider field than comes within the range of insanity, inasmuch as it comprehends the study of all mental phenomena, whether normal or abnormal; while the word Insanity, applied as it may be to all the different forms of mental derangement, has a much more restricted meaning. But this is not all. When a new work is announced as containing the “Elements” of any given science, we naturally expect to find therein the rudimentary principles and facts upon which such science has been founded. All university text-books are compiled expressly with this view; but in the present case, Mr. Noble’s “Elements of Psychological Medicine” is a book which does not supply the student with the slightest elementary knowledge of medical psychology. He sets out with defining “Psychology” truly as a word of Greek derivation, signifying a discourse on the soul; but this done, he starts off at a tangent, and very ungratefully drops the adjective which he has so prominently emblazoned on his title-page. Nay, more: in dealing with Insanity, he plunges at once *in medias res*;—nor can we discover, through the hazy light of his first introductory lecture, that he gives his pupils any elementary knowledge whatever—not the slightest clue to guide them through the labyrinth into which he introduces them. He tells them that insanity, as all are aware, is the generic term which comprehends the class of mental diseases; and he adds—“I very much doubt if any definition that can be given will suggest to the student a clearer understanding of the subject than does the term itself.” This certainly is cutting the Gordian knot of a difficulty which has puzzled many learned authors. The students of the Chatham-street School of Medicine, we presume, forthwith closed their Lexicons, fully satisfied that the etymology of a word is not likely to throw any light upon its signification or proper use. We beg to call the attention of the Philological Society to this important discovery, which may very materially abridge many of their curious speculations.

"In almost every department of knowledge," continues our recondite lecturer, "definitions have been given that utterly defeat the intention of all definition, which is to render the subject more intelligible than it was before; and this is remarkably so in the matter of insanity."

We are by no means certain that this definition of a definition renders the meaning of that word a whit clearer; but this much is evident, that if the word *Insanity* be so expressive in itself as to supersede the necessity of any further definition, the author need not have hazarded a definition professedly of his own, which appears to us the very worst we ever met with, inasmuch as it is a definition which does not comply with the logical requirements of a definition, and contains as many blunders as it does words. "For convenience," says the lecturer, "and with reference to the views which I shall advance in the course of these lectures, I *will venture upon a brief definition of my own, and will define Insanity to consist in chronic disorder of the brain, inducing perversion of ideas prejudicial to, or destructive of, the freedom of the will.*" We had always supposed that a definition aimed at explaining a thing by its essential attributes—those which are common (*genus*) and those which are proper (*difference*)—and that three things were considered necessary to a good definition—viz., that it should be universal, that it should be appropriate, and that it should be clear; instead of complying with which several conditions, the definition before us is a jumble of unintelligible theories, and, in point of fact, it has no pretension to being even called a definition. This the author seems himself conscious of; for he adds, very coolly—"Of course, it may be objected to this definition that it defines nothing—that every part of it requires itself to be defined." (p. xxi.) Why, if it define nothing, then put it forth as a definition? Why tamper with the understanding of the intelligent audience which doubtless listened with profound admiration to these lectures? But what follows? "I am well aware," continues Mr. Noble, "that numerous questions underlie the *category* which I have advanced apparently so simple." (Ibid.) So then, by a curious kind of metaphysical harlequinade, the *category* becomes the *definition*, and the *definition* the *category*! It is evident enough that the learned author never puzzled himself in studying the *Organon* of Aristotle, or the dialectics of the Cartesian, Wolfian, or Kantian philosophy; but we venture to hint, that even from humbler sources, it would be useful for a public lecturer to ascertain, and bear in mind, the meaning of the elementary terms which are employed by all logicians in reasoning upon philosophical subjects. To return, however, to the so-called definition: what does Mr. Noble, in a physiological or pathological point of view, mean by defining *Insanity* as consisting in

chronic disorder of the brain? Has Mr. Noble, in the course of his domiciliary visits at Clifton Hall Retreat, never met with a case of acute mania?—and if so, has he not observed the rapidity of the pulse—the hurried breathing—the flushed countenance—the wild glistening of the eyes—the fierce expression—the contracted forehead—the corrugated eyebrows—the throbbing at the temples—the burning scalp—and the intense exaltation of all the sensorial functions? Has he not noticed the lightning-like rapidity with which ideas rush apparently through the brain, unconnected with each other, giving rise to that strange confusion and incoherence of thought and feeling which has been perhaps as finely described by Coleridge, in his “Pains of Sleep,” as by any medical author.

“A lurid light, a trampling throng,
Sense of intolerable wrong,
And whom I feared, those only strong!
Thirst of revenge—the powerless will
Still baffled and yet burning still!
*Desire with loathing strangely mixed,
On wild or hateful objects fixed;
Fantastic Passion’s maddening brawl,
And shame and terror over all;
Deeds to be hid which were not hid;
Which all confused, I could not know
Whether I suffered or I did.”*

This state of mental anarchy, this confusion of thought and feeling, perplexing and bewildering consciousness itself, we can understand, when we consider that the consecutive relation between ideas is destroyed by excessive cerebral excitement; and it cannot be disputed, for it has been proved by ocular demonstration, that in all such cases there is an increased flow of arterial blood to the brain, which lights up an inflammatory action, and this we find constantly taking place in the incipient stages of insanity.

Or we may venture to ask Mr. Noble if he has never attended the post-mortem examination of persons who have died from an attack of acute mania?—and if so, whether he has not observed the brain and its membranes presenting all the signs of recent acute inflammation; prodigious congestion of the superficial bloodvessels; the pia mater and arachnoid membranes highly injected; adhesions between the convolutions; the grey matter of the brain preternaturally vascular; minute extravasations and bloody points dispersed through the substance of the hemisphere; ventricular effusion, and other signs, indicating plainly that here we have had *acute*, not *chronic* disease, disturbing the normal relation between the mind and its material organ. We readily grant that we have, in many cases, insanity obviously depending upon chronic disease of the brain—our public asylums are unhappily crowded with such cases; but in its incipient stages the disease con-

stantly assumes an *acute* form ; we therefore emphatically repudiate the proposition (we will not call it a definition) that "insanity consists in chronic disorder of the brain."

Nor is Mr. Noble more fortunate in describing insanity as consisting in "perversion of ideas prejudicial to, or destructive of, the freedom of the will." All misstatements and blunders may be more or less entangled with a certain amount of truth ; thus, in some cases of insanity, false perceptions may exist from some obscure lesion of the organs of sense or morbid condition of the brain ; hence a variety of visual or aural illusions may arise, which will communicate false impressions to the mind ; as when the notable knight of *La Mancha* mistook a flock of sheep for an army, and a windmill for a giant. There may also, in some cases—as in impulsive insanity—exist a perversion of ideas, accompanied by an irresistible desire to commit some insane act, which the will, as the controlling faculty of the mind, cannot restrain. But, on the other hand, the perceptions of the insane are, in other instances, marvellously clear, and they will not unfrequently reason upon a variety of subjects with almost preternatural lucidity. It by no means follows, therefore, that we shall find, in all cases of insanity, a perversion of ideas, or a lesion of the power of volition ; indeed the will of the insane, so far from being paralyzed or destroyed, frequently evinces a remarkable power of self-sustaining energy. The will of the insane is often, too, as much under their command as the will of the sane ; and the perseverance and intensity with which it effects its purpose greater in the former than in the latter. Look at the prodigious perseverance a lunatic will take to carry out any wild scheme. With a rusty nail, he will, to effect his escape, for weeks and months work day and night, striving to disintegrate a stone wall ; and when not so occupied, affect a perfect indifference respecting his detention, and evince a conscious self-command over all his actions. The indomitable will of the insane (however misdirected) must be familiar to all who have had any experience in lunacy ; indeed, we apprehend that no satisfactory definition of insanity can be based upon the lesion or aberration of any one mental faculty. We know that Cullen ascribed the disease to false perception of external objects, giving rise to erroneous judgment ; Battie and Ferriar conceived that false perceptions gave rise to confusion of ideas ; while Mason Good, following Locke, argued that the judgment was principally at fault ; but from the views which psychologists have recently adopted, we are led to regard the mind as a perfect unity. "To conceive of mind," says Morell, "under the idea of a multiplicity of powers and operations, will always, in the long run, prove untenable. We know that it is one. The unity of consciousness is at once the deepest, surest fact of our nature, and the most rigid condition for a complete

mental philosophy."* Perception, attention, memory, judgment, volition, imagination, may all be more or less implicated in the disease; but we cannot dissect out either of these faculties from the mind, as we might the different parts of a bodily organ, and say it is the lesion of this or of that particular faculty which constitutes the true pathology of the disease. Hence the failure which has attended the definitions of insanity, proposed by so many eminent medical authorities, upon psychological distinctions which are purely arbitrary. Hence, strange as it may appear, unprofessional authors, being, it may be presumed, unshackled by physiological or pathological theories, and those observers of nature who have aimed rather at giving a *description* than a *definition* of insanity, have succeeded better than some of our best nosologists, not excepting Cullen, Sauvages, Vogel, or Mason Good. We cannot afford space for the digression, or we might illustrate the truth of this observation by extracts from many popular writers; we may, however, be permitted to quote the following passage, which will be met with in Hartley Coleridge's very charming essay on the character of Hamlet: "To be mad is not to be subject to the common laws whereby mankind are held together in community; and whatever part of man's nature is thus dissociated is justly accounted insane. If a man see objects or hear sounds which others, in the same situation, cannot see or hear, and his mind and will assent to the illusion (for it is possible that the judgment may discredit the false intelligence), such man is properly said to be out of his senses, though his actions and conclusions from his own peculiar perceptions should be perfectly sane and rational."† It was Percy Bysshe Shelley if we remember right, who condensed this view pithily in a single line—

"And he was mad—if madness 'tis to be unlike the world."

But the true cause of the difficulty of giving a successful definition in any science, Professor Whewell has clearly pointed out to consist in this—that there must be a clear conception of the nature of the thing to be defined; it must be thoroughly understood in all its relations before it can be formally expressed; for which reason, writers on logic in the middle ages made definition the last stage in the progress of knowledge. We do not marvel, therefore, that Mr. Noble should have failed in fixing upon a definition which, albeit enunciated as his own, and impressed with the seal of his originality, is nevertheless an almost literal travesty of a passage in Dr. Prichard's "Treatise of Insanity," where we find, at p. 7, insanity described as a "chronic disease," manifested by "perversion of the feelings." By substituting the word

* "Elements of Psychology," p. 18.

† "Essays and Marginalia," vol. i. p. 163.

ideas for *feelings*, and involving clumsily the freedom of the will, Mr. Noble appears to have arrived at the above apocryphal definition. We do not accuse Mr. Noble of open, barefaced, plagiarism—amounting to what Dogberry would call “flat burglary as ever was committed”—but there is, *certainly*, a very suspicious family likeness between the parallel passages.

The hypothesis which Mr. Noble's theory involves, that insanity consists in a *chronic* disorder of the brain, necessarily vitiates, *in limine*, his *ex cathedra* instructions upon the nature, treatment, diagnosis, and pathology of the disease. Acute mania is necessarily excluded from his nosography, and the ordinary classification of insanity superseded by one of his own—as original, by the way, as the above definition. All writers and statistical records, Mr. Noble tells us, “have their cases of mania, melancholia, and dementia; and other familiar terms are constantly employed. These, however, do but exhibit the more salient groups of the pathological picture; and in many instances they have little more fixedness than so many dissolving views. For a case of melancholia may become one of mania; or the two affections may be present simultaneously” (p. 124). This is obviously very superficial reasoning. It is quite true that a state of mania may succeed to a state of melancholia, and *vice versa*, or the two forms of the disease may occasionally appear to be blended; but, notwithstanding this, the type of mania and the type of melancholia has each its specific characteristics. Disease of the heart may supervene upon phthisis, or both terminate in dropsy, which may co-exist with either disease; but nosologists describe each as a different disease. So also mania may subside into melancholia, melancholia into dementia, and dementia into idiocy, but each of these different forms of insanity being characterized by specific features, lecturers very properly describe them separately for the instruction of their pupils. Above half a century ago, the learned Dr. Arnold proposed subdividing insanity into ideal insanity (the intellectual of Mr. Noble), notional insanity, and appetitive insanity (which corresponded with our descriptions of emotional insanity). This arrangement was rigorously criticised by Dr. Alexander Crichton, in his “Inquiry into the Nature and Origin of Mental Derangement,” and did not maintain its ground in our medical schools, because the classification is obviously founded upon psychological distinctions, which are so much less obvious than the physical signs which induced Esquirol and Pinel to adopt the classification which Mr. Noble regards in the light “only of dissolving views.” Under the head of notional insanity he includes monomania; and under that of intellectual (*ideal*) insanity, idiocy, dementia, and mania. We may observe, *en passant*, that Mr. Noble makes no allusion to this classification having been originally suggested by Dr. Arnold;

in fact, throughout these lectures he does not refer his pupils to a single authority upon medical psychology, which would doubtless have moved the wrath of honest old Burton, who tells us, in his "Anatomy of Melancholy," that he cites and quotes his authorities, because he holds, with Synesius, that it is a greater offence to steal dead men's labours than their clothes—*Magis impium mortuorum lubricationes quam vestes furari!*

To return. The views of Mr. Noble respecting his subdivisions of intelligential insanity appear to be not a little mystified; he tells us that "the *conventional* terms, *idiocy* and *dementia*, will express the *negation* and the deterioration of the intellect" (p. 141); and shortly afterwards he states that "*dementia* in its actual phenomena is *identical* in a great measure with *idiocy*; in both conditions the essential feature consists in the absence or notable diminution of intelligential power" (p. 150). Here again we are at issue with the learned lecturer, inasmuch as the word *dementia* does not express a state of mental negation, neither is it in any measure identical with the word *idiocy*. What is the approved meaning of this word, *dementia*, as propounded by Pinel? It is that form of insanity, says this eminent authority, which is characterized by "rapid succession or alternation of insulated ideas, and evanescent and unconnected emotions, continually repeated acts of extravagance, complete forgetfulness of every previous state, diminished sensibility to external impressions, abolition of the faculty of judgment, perpetual activity." In *dementia* we have, as here described, a host of incongruous ideas busily passing through the mind; but *idiocy* is a state of mental negation presenting us with the very opposite condition, for from some natural defect of the understanding consequent upon imperfect organization, the mind of the congenital idiot is, as Locke has well described, incapable of receiving or retaining any ideas. If Mr. Noble had ever observed the phenomena of acute *dementia*, assuredly he never would have described it as a form of disease identical with *idiocy*. In the next page, it is true, he draws a shadowy diagnosis between these two mental states; still he fails to give his pupils anything like a correct description of either mental condition. He is not much more fortunate with his description of mania, which he illustrates by a rambling letter addressed to himself by a patient at Clifton Hall.

In each lecture Mr. Noble attempts a variety of pathological observations, all of which are extremely vague, and amount literally to nothing; indeed, nearly at the end of his course, at the beginning of the fifth lecture, we were taken with surprise by the following declaration:—

"In the varieties of mental derangement described in the last lecture, in the cases wherein the presence either of normal illusions or of marked

disturbance of the intelligence constitutes the leading characteristic, we are led by considerations both physiological and pathological to regard the hemispherical ganglia as the special site of the ailment. But whether the several modifications which these varieties offer involve distinct portions of the grey matter of the convolutions, or consist rather in some difference of pathological alteration which the affected structure undergoes, I feel it impossible to say. *I am unacquainted with any facts capable of throwing satisfactory light upon the subject, and unprepared with any speculations tending to elucidate it.*" (p. 165.)

In a state of such profound and confessedly hopeless ignorance, "unacquainted with *any* facts,"—"unprepared with *any* speculations," we not only marvel that Mr. Noble should have had the temerity to deliver this course of lectures, but that he should afterwards have presumed to publish them as setting forth the "Elements of Psychological Medicine." Before assuming the professor's toga, Mr. Noble ought to have better qualified himself for the discharge of his duties; he ought to have "read up" for the occasion, as lawyers do when they get up special cases, and he should have taken care to have had a more elaborate brief before him; for it was obviously Mr. Noble's duty to obtain such information as might enable him to lay before his pupils the facts which are known respecting cerebral pathology in connexion with mental disease. The suicidal confession of his being unacquainted with any, recoils upon himself, and would imply that he is wholly ignorant of the researches and observations of Foville, Parchappe, Guislain, Brierre de Boismont, and a host of French pathologists; nay, if Mr. Noble had only given himself the pains to examine the *Annales Psychologiques*, or—and we affirm this without exposing ourselves to the least charge of vanity—if he had consulted many of the numbers of our own Journal, he might have alighted upon some facts which would perhaps have materially dispelled the darkness of which he complains. To allege that no progress has been made in the pathology of the brain, either abroad or at home, and that no facts exist which throw light on the structural changes which take place in certain mental diseases, is simply absurd, and would suggest the propriety of the lecturer changing places with one of his more intelligent pupils; for he evidently wants the information which he professes to teach. In such a position we can readily understand that Mr. Noble was, as he states, "unprepared with any speculations tending to elucidate the subject," for theories are suggested by facts, and Mr. Noble avows that he has none at his command. In such an extremity, therefore, he could not, like Mephistophiles guiding his scholar Faustus through the Brocken, even hail a single *ignis fatuus* to cheer his benighted class.

In the course of these Lectures, Mr. Noble formally announces to the scientific world that he has ceased to be a phrenologist. "The system

of phrenology," he says, "*cannot*, I am convinced, be sustained by a just philosophy." We may here, perhaps, be permitted a slight digression, for "thereby hangs a tale." In the year 1846, Mr. Noble published a goodly octavo volume, entitled "The Brain and its Physiology," which is, from page 1 to page 450, written avowedly upon phrenological principles; and therein he goes out of his path to revive a controversy which, by his own confession, had been disposed of about sixteen or seventeen years ago."* The facts we believe to be briefly these: The late Dr. Milligan—the learned translator of Celsus—in the Appendix to his Translation of Magendie's "Physiology," suggested that instead of bringing the light artillery of wit and ridicule to bear upon the system, or fighting upon obscure metaphysical grounds, a direct *experimentum crucis* should be made, and different heads and characters compared with each other. The celebrated Sir William Hamilton, now Professor of Logic in the University of Edinburgh, thereupon instituted a very interesting, and, at that time, a very curious, series of experiments; and after weighing brains, measuring crania, &c., he came to the conclusion that not only was phrenology untrue, but that its several propositions led to the very antipodes of truth. This induction was ably followed up by Dr. Stone; thereupon Mr. Combe buckled on his armour, and then a fierce Junius-like controversy took place, and we can scarcely remember which party came off victorious; but, sixteen or seventeen years after this, it was not a little ludicrous to find Mr. Noble taking the field in a Hudibrastic fashion, to again and again slay the already slain. The attack which Mr. Noble made on Sir W. Hamilton and his contemporaries was, of course, highly successful! How could it be otherwise? He had no enemy to contend with; the field had been already left; the victory therefore rested, as the book on the Brain before us assumes, with Mr. Noble; so have we seen, in our boyhood days, a victorious army sweep across the stage of Astley's Theatre, followed at a distance by Mr. Merryman on an ambling nag, blowing a penny trumpet, and congratulating himself upon the victory. But mark what follows! Seven years have now elapsed—the true Pythagorean period for the regeneration of fallen humanity—and behold Mr. Noble comes out in the Lectures before us a veritable anti-phrenologist—nay, takes up the very arguments (of course, without acknowledgment) which were formerly used by the men whom he assailed. He tells us that his "doubts of the validity of phrenology were first occasioned by the perusal of an article by Dr. Carpenter, in the "British and Foreign Review" (Preface, p. x.); and in his "Lecture on the Physiology of the Brain and Nervous System" (pp. 36—83), he details the reasons for his secession—or, in more fashionable language, for his "perversion"—from the true Church of

* Noble on the Brain, p. 279.

Phrenology, with as much circumstantial detail as if it were an event of as great importance to the world as the conversion of Constantine to Christianity, or the apostasy of Julian. We apprehend, however, Mr. Noble's apostasy from phrenology will give the friends of that science as little concern as his attacks gave the anti-phrenologists, who, we believe, never took the least notice of them. He will now, we fear, be respected by neither party, thus illustrating the truth of the old proverb, propounded by no less a philosopher than Seneca—*inter duas sellas decidium*.

We repeat, in conclusion, that Mr. Noble's book, addressed to those who are engaged in the practical study of insanity, will not supply them with the information it professes to give; it is, *de facto*, not a work on the Elements of Psychological Medicine; and we feel fully justified in endorsing the volume before us with the Virgilian caution, "*Nimum ne crede colori*," which we may freely translate—"Never buy a book from its title-page!"

ART. III.—ON THE HYGEINE OF CRIME.*

IF the human race had obeyed the divine mandate, "Fear God, and love thy neighbour as thyself," crime would be an anomaly, and there would have existed no necessity for Mr. Hill to have written the interesting book now under review; for interesting it is, not merely because it displays, with something like a Rembrandt shading, the real night-side of human action, but because it inspires us with a hope that the adoption of the principles inculcated in its pages will lead to a diminution of crime, and an alteration in the treatment of criminals.

The criminal code is, of course, based on the infraction of those injunctions that were engraved on the sacred tables of stone. All crimes are, of course, sins; but there are some which, as they are matters at issue directly between the Creator and His creature, do not affect society, and therefore are not catalogued among *national* delinquencies. By the infraction of one of these commandments, although they may desecrate the heart, still there is no outbreak to constitute *illegality*. Four of them, however—murder, adultery, theft, and perjury—essentially affect the welfare and happiness of society, and become at once the special objects of the criminal law. Beccaria measures crime by the amount of injury inflicted on society. Crime would, *primâ facie*, seem to come legitimately under the analysis of the lawyer, inasmuch as the criminal code forms a large portion of his

* Crime: its Amount, Causes, and Remedies. By Frederick Hill, Barrister-at-Law, late Inspector of Prisons. 1 vol. 8vo. J. Murray, 1853.

practical study. But, unhappily, the law has been so deeply engrossed with the punishment of a *committed* crime, that it has hitherto almost delegated the duty of prevention to others. It would, indeed, be a blessing if the system of prevention had been more successful, that it were now possible to sheathe the bloody sword of justice; but the wish, though standing prominent in every philanthropic mind, is but an utopian dream; the prevention of crime will ever fall far short of our hope, constituted as human nature and human society are at the present day.

And to whom is this Christian commission issued? The divine monitor we must, of course, regard as the spiritual indicator to happiness, and to heaven. But, alas! that we are bound to record it, the coldness of many of the professors of religion is too often satisfied with doling out their homilies at stated times, half-forgetting that the very creatures who most need their pious exhortation are those who intentionally and habitually stay away from the recognised temples devoted to the worship of God.

There are, of course, numberless instances where fools "who went to scoff, remained to pray." Doubtless, many a pious divine has been constantly blessed with proselytes, especially those who deem their personal visitations, at least, as essential as their pulpit oratory. But how constantly are the most devoted efforts thwarted by latent influences, which the divine and the lawyer never dreamed of. How often has the scattering of good seed utterly failed because it has fallen on barren ground; or, what is as bad, a soil vitiated by the weeds of disease—and how often has the criminal, in consequence of diseased organization, lapsed again into his degrading courses, when his professions, perhaps his half-purified *intentions*, had promised better things.

In analyzing the able treatise before us, we may at first, perchance, alarm the timid spiritualist, by affirming, that in the great majority of even premeditated crimes, some morbid change has previously occurred in the organ of thought, or in those with which it intimately sympathizes. Let not the sensitive heart be scared by this affirmation—not for one moment would we assert this physical change to constitute any irresistible stimulus to crime. This would at once arrogate the doctrine of necessity, and remove all responsibility from the free agency of man. We merely mean to express our belief that deranged conditions of the body may influence the mind by sympathy as well as immediate disease of brain; and this may often suggest an extenuating plea for even grave offences against the person or the state. Indeed, the law itself has ever recognised this truth, that where there is a *mens insana*, which we know not to be a mere *metaphysical* state, it withholds the capital

punishment for crime, and *detains* until the sovereign's pleasure decrees otherwise.

We perceive at once how deeply important to the other learned moralists is the science of the physician, in the matter of crime. His efforts are often essential—indispensable, indeed, in preparing the cerebral soil for the husbandry of the divine: and how constantly his experience is demanded in the court to enlighten the bar—ay, even the bench—with the light of pathology, when they would be else in dilemma as to the sanity and responsibility, or the madness and irresponsibility of an arraigned prisoner. If then the sages of the three learned professions would but join hands on the debatable ground of psychology, by such a union, we are certain, a world of blessing would be conferred on mankind. But the divine has been long wont to regard as his especial province, rather the remote causes; while the recognition of the exciting causes or motives of crime, seems to be the especial subject of the judgment-seat. Thus the third, or proximate cause, is completely overlooked. We hope—nay, freely acknowledge—that the pulpit has its multiform blessings; it may even dispossess many an evil spirit, and the law may exalt its penal tortures to frighten the mammon or the Moloch out of man's heart; but how, if the evil spirit of *disease* be there, will not that be a stumbling-block in their way? In such dilemma, they must come to the physician, to eradicate first the real poison from man's blood, or they may continue to preach or threaten in vain. We believe that such a blending of forces, if wisely effected, might even lighten the heavy weight of the Newgate Calendar, and prove a court of ease to the Old Bailey.

In treating this comprehensive work psychologically, we hope to go still further, and to show that, by ensuring a *corpus sanum*, we have the best chance of forming, by education and other trainings, a *mens sana*; and if these happy elements are in us, and abound, there will be even less dropping of black caps on judicial wigs, and far less of degrading iniquity in the common room of Newgate; and, what to the purse-bearer is of little less weight, a wondrous diminution of the county-rate.

We do not read, however, even the title-page of our author, whose office offered him the very widest field of observation, without noticing how nosologically he has arranged his subject: "amount," "causes," "remedy," are but more legal, or more popular, terms for *pathology*, *etiology*, and *treatment*,—and if we analyze further, we see, in truth, that the elements of every chapter are, probably without the consciousness of the author, psychological. The prevention of crime refers as much to the inculcation of good precepts and the withdrawal from bad example, as to the influence of bolts, bars, and scourges. Now, it

would indicate very little influence on the mind, either by a precept or a fetter, were the amount of crime to remain in *statu quo*; yet the letter of Mr. Dufton to Lord John Russell, written ten years ago on this point, is not very flattering. If we go still further back, personal insecurity, in the dawn of the last century, or in 1781, when Horace Walpole wrote his amusing stories to the Countess of Ossory, or even in the early youth-time of persons now living, was proverbial. We must, at least, acknowledge that we can now ride and walk in comparative safety.

But this comparative state of social security is not, we fear, so much owing to the moral culture of the universal mind (Robert Owen's parallelograms are not yet established), as to the difficulty of perpetration, in consequence of the improvement in our police. The Bow-street runners may have been active and cunning bull-dogs of the law, but the watchmen were a mere phalanx of old women out of petticoats; and even the mounted dragoon often failed to subdue a riot by the *caltrops* that were strewn along the road.

Even in the late threatened outbreak in the manufacturing districts, such destructive instruments were extensively forged—of these we saw specimens. Therefore, with bad roads, and a woful deficiency of lamps and defenders, we wonder not at the criminal triumphs of Abershaw, Barrington, and Turpin.

The isolated cruelties of the present day prove a latent malevolence still brooding in dens and alleys—witness the sudden ebullition and onslaught of the red republicans of Gaul, that only await the breath of rebellion to light it again to a flame. We ardently hope, nay, confidently believe, this breath will not readily be excited, notwithstanding the bad feeling engendered in the heart by a portion of the current literature of the day.

True, we hear little now of marauders, freebooters, and caterans: a freer intercourse and open roads, and even the footways of the tourist, have revealed passes and fastnesses in Scotland and Cumberland, once only known to the Roys of former days.

But there is one paramount psychical force that is now by steam and post working its gigantic blessings on the world. Facility of intercourse is daily amalgamating the national, the universal mind, and fraternizing the beings of our earth; and doubtless those rulers, who would even now have been guilty of the heinous crime of lawless invasion, have learned, or been impelled by this facility, so to know and to esteem their neighbours, that they have at once sheathed the sword which would constantly have been drawn, and been wet with the blood of an enemy.

Now there is no doubt that bad training is one of the main pre-

disposing causes of crime. "Train up a child in the way he should go, and when he is old he will not depart from it," and "the child is father of the man," are sacred and profane truisms on every one's lips. The evidence of very careful observers, cited in Mr. Hill's third report, is most deplorable, and proves how much of degraded profligacy exists, both in those parents who, having debased themselves, and lost all self-respect, daily neglect and destroy the minds of their offspring, and in those who, falling under the impulse of passion, have produced beings (the natural children of most unnatural parents) either to starve, or live by crime. We therefore coincide with our author that the parent might very fairly be made in a degree responsible for the crimes of his child while under age, just as he is for the contraction of a debt. The producing of a child that *must commit a crime to live*, is an infliction on society that demands the most condign punishment; for it must follow that the field of the mind not cultivated with healthful blossoms will run wild with weeds. A creature of reason that thinks and feels *must*, by the centrifugal force of that intellect, vent and direct it somewhere or to something; and it would indeed be almost a miracle if this *instinctive* being, fraught with impulses and passions homologous with those of the brute, should not indulge and feed them by every slavish mode, for indeed he scarce knows better—he is but a step above the beast of the field. But he has a soul to be saved or lost, and, indeed, lost he *must* be, if not protected; for, like Ishmael, every hand will be raised against him. Now we were almost about to write something like an absolution for these unhappy creatures. It is a delicate ground, we own, to tread on; and yet, taught as we are that where much is given much is required, may we not also hope that for those whose little of good is filched from them, mercy will temper justice in the final award. We scarce know a deeper object of sympathy than such a being as Mr. Barclay has so graphically described, in his pamphlet on "Juvenile Delinquency."

To ensure a happy result—to obviate crime—the culture must be commenced at the dawn of its development by the mother, for, "just as the twig is bent the tree's inclined." We know there is a supreme delight in the little heart of a child who is early taught to read. We do not mean a wearing of the brain with a *course* of study. The *rough hewing* of the great model of mankind, Alfred, was begun by his mother, almost in his nursery; and it is a fine eulogy, even on *his* memory, to record that it was a psychical influence, a literary reward, that was his first stimulus to good.

In this way the blood is *calmly* directed to the tuition and development of the noblest organs—those of intellect—and not exclusively to the sensual. But we must yet economize, and even here ensure a due

supply of blood to the organs of assimilation, or we shall mar instead of make; and instead of sending rich and fertile blood to the intellect, it will be a poor and impoverished fluid. The success of Guggenbuhl will prove our position, who ever improves the health of structure in the cretin ere he essays the cultivation of the mind of low standard.

That even in Britain this course of psychical culture is not essentially costly, is shown in the reports of Sheriff Watson, of Aberdeen, Mr. Davies, and others.

We may observe, also, that the cheapness of the posting-rate will tend much to the improvement of the working classes, who are extremely proud of their faculty of correspondence by letter with their friends.

On the subject of "hereditary crime," as it is termed, to which our author draws attention, we must observe that this consists merely in a tendency or predisposition, just as in struma or gout the seeds or germs may be latent even for a life, if due care be observed to keep healthy the crasis of the blood. So, if the moral and intellectual organs be brought into due and healthful play, the hereditary tendency to crime may be readily controlled and thwarted. Psychical as well as physical actions may be equally illustrative of John Hunter's axiom.

Of course there are exceptions where there is permanent disorganization, or preponderance, or deficiency; these cases are of course irremediable, but they are rare. Phrenology may decide that there may thus be an entailment of a disposition to commit crime almost or completely irresistible.

But this monomaniacal disposition to commit crime is not merely hereditary, it is too constantly imparted, and this more especially in the paramount incentive, intoxication, that exhibits in some prisons, as, for instance, that of New York, a percentage over other causes of nearly four-fifths. In the case of Mobbs, executed in November last, drinking was the provocation, both in the murderer and his victim.

The confirmed drunkard is often (for a time) a *furious* madman—that is, during the stimulation of the alcohol: when that has subsided, he becomes the hypochondriac—the *melancholy* madman—and must *repeat* the vice, to lift him out of the slough of despair, which is insupportable. Thus the drinking monomania, like many other minor vices, "grows by what it feeds on." It is a deep psychological subject, but we can here only hint that over-stimulation, by slow and stealthy degrees, wears out the sensibility of the brain and nervous system.

But it does not always require *deep* drinking to constitute a sinner of this class. The sensibility of the brain may in some be so hyperacute as to be excited to frenzy even by a small quantity of stimulant. The contrasted degrees of this sensibility are wonderful. We knew

two clergymen—one really amiable—so constituted, in whom two glasses of wine lighted up the brain so intensely, that the grossest expressions then fell from their lips. On the contrary, a stalwart and hard-working drayman has been known to swallow from ten to twelve pots of porter daily, without intoxication.

The state of the drunkard is a sad decadence of human nature: the alcoholic excitement may not only induce to crime, but it may render the mind and conscience perfectly callous and reckless, so as to destroy all shame, and fear of consequences. The thought of the drunkard is often a selfish and isolated elysium.

Poverty and drunkenness almost invariably go hand in hand. We learn in Mr. Hill's appendix, that many waste in drink 36s. out of their earnings of 40s., a very large portion, probably, of the sixty-five millions annually spent in Britain on alcoholic fluids.

We were gratified to learn from our author with what facility and impunity the slave of the gin-palace can break through his evil habit. We have the evidence of "an intelligent prisoner," in one of the reports, that "the craving for drink generally dies away in the course of eight or ten days." In the report for 1850, he quotes the affirmation of Mr. Fox, of Derby, that "in 27 years he never knew an injury to health by the sudden withdrawing of stimulating liquors." Of course he does not allude to the condition of delirium tremens.

That the minds of paupers are often willing to break this evil habit the author proves, by their *voluntary* application for admission to a prison, "*to be cured of drinking.*"

We believe that the association of drunkenness with crime forms one of the most profound subjects for the consideration of the psychologist and legislator. (The question of the abolition of the gin-palace, and the injustice of quashing the *vested interest* of a landlord, is foreign to our present criticism.) If we assimilate, we were about to write identify, intoxication with insanity, the resolution of the question would go far to remove one of the dilemmas of the criminal court, or the lunatic commission. May we hazard this proposition. If *slavish* and continued drunkenness be indulged in, and murder be the consequence, the manslayer is, *in a moral sense*, equally criminal as if he were at the time sober. Paley, with his fine-spun sophistry, argues that a drunken murderer is responsible only for three-fourths of the guilt of a sober one!

Now it is clear that ere the delivery of a verdict on a drunken criminal, it should be inquired, did the murderer *make his own madness by drink*? The degree of homicide by a *self-created* drunkard cannot be far short of that of a sane or sober man; the crime, surely, cannot then be chance medley, or even manslaughter, but murder, and should be *most severely* punished. (We argue not here for or against the *capital*

infliction.) So that the special plea of monomania, that often acquits a man on all other points sane, should, we think, in this instance fail, especially if the culprit be proved to have threatened revenge, and nursed his malevolence against his victim in his *sane or sober moments*.

It is curious to note the influence of an antagonizing passion or force in the control or suspending of crime. The author informs us, in his report for 1847, "that although there were (at that time) about 1000 depositors in the savings-bank at Jedburgh, only one of these depositors, during a period of five years, had been committed to prison"—not merely, we believe, because they had money to spend, but that they felt a sort of pride at being known as people of property and character.

The slightest change of subject for thought or contemplation will often, by the force of novelty, eject for a time a more degraded passion. The author records an extreme diminution of intoxication in a county town, during the week of a travelling exhibition.

In discussing the further means of diminishing poverty and crime, Mr. Hill refers to "the habit of self-control and forethought." But now, even if they could or would listen to the precepts of a devout minister, the callosities of the mind might not, *therefore*, be softened down: for there is often a poison in the brain which requires an antidote more material and potent than moral suasion, which may have, to use a chemical phrase, a greater affinity for the organ of thought than the vice itself: and, indeed, we observe that allusions to such antidotes peep out almost unconsciously throughout the pages of Mr. Hill's book.

Poverty is doubtless a very frequent incentive to crime, but the word poverty itself is a mere *relative* expression. Contentment may be witnessed where there is merely enough to support life, if *comparison* be not brought into the poor man's train of thought. Directly he *compares his want* with *others' luxury*, and especially if he be excited by the imitative monomania of combination, a sort of insurrection is uppermost in his mind, and he is at once for pulling down others to raise himself. Thus the wildfire of the brain blazes out into rebellion, not because others are happier, but more wealthy or honoured than themselves. Perhaps this involves the secret of the psychical influence resulting from a "*direct pecuniary interest*" of the workman in the factory of his employer. "I should augur," writes Mr. Hill, at page 127, "the best results from the plan being carried into general operation, as I believe it would benefit both parties, remove many mistaken and exaggerated ideas on the part of the workmen as to the extent of their employers' gains, increase the sympathies between the different classes of society," &c.

As the minds of men have become enlightened, the penal statutes have been doubtless much improved. The ordeals of burning ploughshares, ear-lobbing, ducking-stools, and other ordeals of inquisitorial torture, have been abolished; partly subsequent to the jurisdiction of Sir Matthew Hale, but chiefly since the bill of Sir Samuel Romilly.

The principle of punishment is little understood. It is not based on a system of retaliation or revenge, like the code of the Hindoo and other barbarous or superstitious nations; not exactly in the words of Paley, "the retribution of so much pain for so much guilt," but as a warning and example to the mass. The system of *private* execution, so energetically recommended in the letters of Charles Dickens, is, we think, a mistake. If the public mind be not deterred from crime by the public execution of a criminal, why is it? Partly from the maudlin sympathy and petting lavished on many a capital felon by a set of whimpering sentimentalists, but chiefly because it is believed, and almost proved, that the culprit rarely *suffers physically*. The sensation of hanging, like that of drowning, is rarely a very painful one; and this is very generally known and discussed in the coterie of felons. In proof of this, Mr. Hill refers (p. 173) to a mock trial in a prison described by a felon, "when one of the prisoners sitting as judge, some others acting as witnesses, and others as counsel, all the proceedings of the court of justice were gone through, the sentence pronounced, and mockingly carried into execution. I shall not forget that day when one of these murderers was placed in the cell amongst us beneath the assize court, a few moments after the doom of death had been passed upon him. Coolly pointing the fore-finger of his right hand to his neck, he said, 'I am to hang!'"

As to the sense of degradation and shame in these sinners, it is a term not often found in their vocabulary. On all accounts, then, and especially from its psychical evil, we would not advocate capital punishment; but the penalty for crime should consist in a graduated and properly apportioned infliction of *pain*, for without such infliction of pain—physical or mental—there could be no punishment. Let us not be libelled with the word *Draconian* for this opinion: the penalty we advocate is not an inquisitorial torture to extort from the lips of innocence, but a meet suffering for a proved or confessed crime; but, we repeat, there is no *need* of *death*. But where extreme cruelty has deeply blackened the commission of crime, as in the cases of Tawell, Greenaere, and Rush, what degree of punishment can be termed severity, always supposing the criminal were *aware* of the penalty adjudged to the crime by law? For such, we were almost about to suggest the code of that island king, who said "the *least* punishment we have is death."

Death, indeed, in the midst of sin, is ever an awful end; and the dread expectation is a thousandfold increased when it is the exit of such consummate monsters. To insure the full psychical influence of punishment, there should be a graduated and repeated infliction of *pain*—perpetual, and occasionally silent, imprisonment under scientific surveillance—at least, the public should be taught, or convinced, that it is so. Were this witnessed, then we believe the mob would constantly dread the commission of the crime that called for it. And surely, the most morbid sensibility could not deem even the infliction of mere pain on a thousand cruel, if it were proved to have been the preventive of *one* murder. And then a jury would never be deterred from delivering a verdict of guilty, even on proof of capital crime, if they were sure the culprit's blood would not be on their heads. Pages of nonsense have been written against the disgrace of branding or affixing a permanent mark on a culprit; but we believe the possibility of such a disgrace would be a very efficient prevention of many a deep crime. A criminal who, by his or her heroic bearing on the scaffold, gained the admiration of a mob, would come down from his stilts at once if he were seen to wince under a cat, or carried about the scar of a *brand-iron* on his forehead. We should not then be disgusted with the debased vanity of a Hocker, who, to prepare himself for the scaffold, was engrossed with his toilet when he ought to have been poring over the precepts of his Bible; or the Satanic pride of a Manning in *dying game*, according to the slang phrase, on the scaffold.

All this, we believe, would be merciful—its result, a voluminous saving of life—and, indeed, eventually really abridge suffering in the mass. We should then, at least, hear no more of *suggestions* or temptations to crime by the exhibition of a capital punishment. We believe this mode of punishment would have met all the arguments of Montesquieu, Rousseau, Beccaria, and others who have commented on the insufficiency of our penal laws. With all our apparent severity, we may here record our belief, that the psychological study of many a culprit might often indicate such a state of stricken conscience and deep remorse as to prompt us to implore a pardon; but this should not be granted until the strictest investigation has confirmed the work of contrite repentance. Pardon is sometimes a greater reformer than punishment. The abolition of penal death would, in this also, be a great blessing; it would afford the best chance, even after extreme severity had been endured by a criminal, of psychical amendment. He might be turned into a course even of honesty and virtue. Our prisons would thus be converted from torture-cells into *maisons de santé* of the mind. Mr. Hill comments with much sagacity on this point.* Above

* Page 150.

all, the life of innocence could not then be sacrificed to the uncertainty and chicanery of the law of evidence. Nothing can compensate the family of an innocent victim; but the lavishment of kindness and assistance might go far to compensate a man for the memory of bars and fetters. We quote the following passages from page 151:—

“While it is still left to the courts of justice to determine on the guilt or innocence of the accused, and on the necessity of their withdrawal from society, it may be assigned to those entrusted more or less directly with the reformatory treatment to determine the time of release; subject, however, to a most competent, well-appointed, careful, and responsible supervision and control, and subject to the proviso, that no amount of subsequent good conduct should be considered sufficient to warrant the liberation of a person who had once been guilty of deliberate murder.”

Coinciding with much of this, we must yet observe that it may involve a serious error in thoughtless minds, drawing as it does too little distinction between consciousness and responsibility, and their contrasts. The term *criminal lunatic* is a misnomer that has to this day involved much useless discussion and dilemma. Now, seeing that our lunatic asylums are constituted hospitals for cure, and not as in former, indeed very recent days, places for detention, we still think, with Mr. Charles Pearson, that there are cases of monomania, as that of M'Naughten, which might most profitably, and even healthfully, be submitted to a sort of unconscious punishment in the shape of labour. Scientifically apportioned, it would indeed be salutary food both for body and mind; it would concentrate the thought on useful matter of fact, dislodge the burrowing of melancholy, prevent the moroseness of congestion, thus defending the insane from themselves and their dark thoughts, and becoming perhaps the penal, though merciful, preventive of further delinquency.

On the adoption of such a system, however, the inspector must not be a Crown lawyer, but a psycho-physiologist—able to discriminate between malingering and truth. *He* would also be able to decide on the moral or physical convalescence of a prisoner ere he be liberated and permitted again to be at large. Among other modes of effecting parallel improvements, Mr. Hill suggests “to give the judges an unlimited power of imprisonment in certain cases, with a view to assign such period of imprisonment as would be long enough to afford all reasonable opportunity for reformation, the pardoning power of the Crown being exercised whenever it should be *deemed safe* to release the offender before his allotted time.”

In allusion to the contrast of this, the protracted detention, we read—

“Let it be observed that in Switzerland and America, where freedom is held as dear as in this country, imprisonment is sometimes awarded for the whole life, and without, therefore, the limit provided by the plan under consideration—a limit depending on cure; and that it is of frequent occurrence that, even as it regards the young and comparatively innocent, an offender is placed in a reformatory school (which is, in fact, a prison), there to be detained, should it be judged necessary, until he be of age, a period generally sufficient to allow of an effective training to habits which will prevent a recurrence to crime.”

With all our penal infliction, it is not impossible to combine reformation and cure both of body and mind; and the psychological changes often observed from casual events, sanction and encourage the adoption of a systematic plan.

We must not here widely dilate on the *kind* of punishment most efficient, but we may so far coincide with Mr. Hill as to believe a judicious system of imprisonment more efficacious than transportation—a course never adopted in Belgium, America, or Switzerland. The abolition of transportation was, we believe, hinted at in the last Speech from the Throne, and our colonists in many quarters of the globe entertain a decided objection to it. As our late inspector would regulate it, imprisonment might be far less costly; by judicious management, indeed, almost self-supporting. It would certainly be a safer and surer mode of custody. When amendment—the psychical cure of the propensity—is effected, then, and not till then, may the prisoner be transferred to another clime, not as a convict, but an emigrant.

The separate and silent systems of imprisonment seem most judicious in theory, and so would they be in practice if carefully watched and graduated. Even the prospect of *re-association*, to one enduring the severe penalty of seclusion, will act as a healthy stimulus to the vascular and nervous systems. Anything that induces hope, is effective both in physics and in morals.

The author offers objections to the silent system; but there are some objections to *all* penal inflictions and their execution. An executioner can no more be esteemed than the capital punishment approved. It is said to be *unnatural*; all human punishment is unnatural, since all are equal in God's eye.

We really approve of a modified and temporary silent system; and the prisoner, if he think he deserves it, will be patient under its infliction. It preserves him from bad counsel; for all intercourse and converse of criminals usually tend to evil. It gives him time, too, to hold communion with his own heart. This must, of course, be graduated and strictly watched, or imbecility, or even insanity, *may be* the result. The mind, like the body, if *starved*, will die.

The consciousness of error is the first step to repentance, and silence and solitude will often induce reflection, and tend to this result. Like all potent remedies, solitude may be carried too far; but this is no argument against moderate doses. Moderate doses of opium induce healthy slumber; but it should not be decried because an over-dose will kill. The physician should watch the influence of silence and solitude just as he would the effect of bleeding and digitalis in acute inflammation, and desist from both when the mind has been chastened or enough blood has been lost.

It does not appear that silence and separation are so destructive, from the continuation of the stringent system at La Roquette, in Paris. Of its rules we quote the following :—

“Every boy has a separate cell, leaving it only to take exercise in his turn.

“The exercise-yards, chapel, school-room, &c., are all so contrived as to enable the teacher to see and communicate with all the boys at once, but to prevent the boys from seeing each other,” &c.

By this adoption we may soon be able to discriminate between the criminal and insane offender—a psychologist would easily make an accurate diagnosis.

Isolated cases of apparent failure must not invalidate this potent mode of correction. Perhaps it may be rejected as too costly; but a rigid economy should be enforced. In Newgate, each prisoner costs nearly 40*l.*; in Bridewell, 50*l.* per annum. The expense of none need extend to 20*l.* per annum.

That separation is useful, we are certain—more, perhaps, in the adult than the juvenile. We think, too, that during association of a sort of secondary punishment might be adopted for bad speech or counsel, and thus we might establish a sort of purification in criminal society.

The psychology of the criminal court is one of the most curious subjects for contemplation in the arena of the law; it becomes painfully so when we become conscious of the untruth and misrepresentation which its arguments and its proceedings exhibit. Indeed, if a stranger were to witness the defence of many a culprit for the first time, he would scarce believe, amidst the ribaldry, and, sometimes, utter lack of solemnity, that the life of a human creature was at stake: he would, at another time, blush for the long robe, when he sees “the hall of justice degraded, as it too often is, into a kind of mental boxing ground, where witnesses are insulted and brow-beaten, and where the prisoner, to his surprise, sometimes finds that any acts of trickery and deception which he may have practised (and which probably led to his being then on his trial) are outdone by

the well-dressed gentlemen around him, in their power of twisting evidence, distorting facts, and implying, with well-feigned simplicity, the truth of that which they know to be false."—p. 167.

It may be all very fine to admire the sophistry and special pleading of a defence, but the power of advocacy, by making "the worse appear the better reason," is often dangerous in proportion to its power. In the case of Courvoisier, indeed, not only was the guilty on the point of escaping, but an innocent was nearly being arraigned, and might have suffered.

The sacredness of truth, however Samuel Johnson might have counselled Boswell in sanction of the argument to *disprove guilt*, should be far more devoutly observed; and although we would all rather a thousand culprits should escape than that one innocent should be done to death, yet, when evidence is clear and convincing, that a felon should slip his neck out of the noose on the strength of that disgusting quibble, a *flaw in the indictment*, is a palpable disgrace to the criminal law.

"Judex damnatur cum nocens absolvitur."

Now, if in lieu of death we established incarceration for life, unquestionably the degrees of prison discipline should be justly varied and adapted. The cell of a capital convict should be a penal dungeon—a room within dark and unadorned walls, not like those of Holloway and Reading; the culprit should not be proud of the style of his fine mansion. This graduated discipline, especially with the principle of *responsible* inspection now adopted, would complete the abolition of promiscuous association, on which Mr. Hill writes very judiciously. Indeed, the old prisons may well have been termed *seminaries for crime*, especially when scarcely conscious and ignorant youth came under the blighting influence of manhood accomplished in the principle and practice of crime. On the soft and excitable brain of a youth the influence is dazzling and almost electric. Imitation also in the young is half-instinctive; and the boy is at once fascinated by the glowing colours which a Nestor in crime flings over the picture of his career, and he may become at once his slavish admirer, his half-worshipping proselyte.

"To send a child," writes our author, "seven or eight years old to an ordinary prison, to a fortress with grated doors and barred windows, guarded at all points and surrounded by high walls, would seem, when stated in plain terms, to be an act both of folly and cruelty. And when not only the child is treated without regard to the feelings and fears of infancy, but owing to the bad state of the prison, the little thing is placed in a position in which he is in danger of being corrupted for life, the picture in all its features becomes painful and revolting."—p. 158.

From the statistical reports of committals, we regret to learn that it is in the heyday or prime of life that the great mass of crime is committed. It may be, by the unreflecting, presumed that high health may then predominate. But psychology at once discovers *undue* excitement, of the brain especially: the eccentric principle of the will takes a wrong course. But even this erethysm, when *rightly directed*, may aim at the accomplishment of noble deeds; we then term it enthusiasm. But here, alas! the excess of energy expends itself in crime.

There is then often no time for the influence of a moral remedy, but the physician may do much by subduing this excess—this hyperæmia of the cerebro-spinal system. We agree, therefore, that incarceration should be *penal*, and not mere confinement. The prison should be far less comfortable than the union, or we may have some difficulty in *ejecting* a prisoner after his term is completed. The author relates an amusing case, indeed where ejection was only effected by *smoking* the prisoner *out* of his cell.

The plan which has been advocated, of the participation of a criminal in the profits of his work, may change at once his psychological character. His mind is elevated by the consciousness of his now being useful: he is in fact, so far, *converted*. The author quotes many proofs of the efficacy of this system in the prisons of Munich, New Jersey, &c., and it is asserted that “very few prisoners who earned money under this rule ever returned to prison.” Then, and only then, when he is conscious of this utility, can a prisoner with safety be discharged. It seems, from the authority of Mr. Crawford and Mr. Russell, that the tread-mill is worse than useless. In corroboration, we quote a sentence of Lord Derby when Secretary of the Colonies. “No man ever performs strenuously a task imposed with no other object than that of keeping him employed.”

Now, the hygeine of crime is in all this even of deep importance. If we well regard the psychological phases of a case ere we adjudicate upon it, we may often discover that the depravity has its root in monomania; it needs then the infirmary, and not the cell.

A sudden and violent act in a person previously rational, or merely reserved, may indeed be the very outbreak of mania that had been incubating in the brain. It is the hot fit of a fever, after the reverie, the cold stage or rigor, has passed. But even now the mania may be nipped in the bud, and the brain functions preserved, or rather restored, perhaps by one bleeding. Can we forget the case of the statesman who was seen by his physician to attempt to stanch the blood in his neck wound, after its flow had relieved his congested and maddened brain?

We witness illustrations by analogy of the hygeine of crime, in the

criminals who labour at agriculture in the open field. "It is well known," writes Mr. Hill, "that there are very few attempts to escape from the well-conducted juvenile prison at Mettray, near Tours; and such attempts are rare also at the prison at Berne, used for adults as well as for children, where the greatest criminals in the canton are confined, and where a large portion of the inmates are employed in agriculture and gardening." This interesting fact, we think, can only be reconcilable on the principle of the hygeine of crime. The brain partakes of the general health of the body, which the tillage and turning up of fresh earth, and the fresh air induce, and the mind feels at once a zest and relief in the occupation. Gil Blas refers to the digging of Count D'Olivarez as a relief to his state of melancholy.

There is hence a joyousness imparted, and the boys, we know, at Parkhurst, at Mettray, and at Red-Hill, scarcely wish for a change. In no other way can we explain why criminals with no cordons around them do not often attempt to escape, however they may fear a *greater* punishment if they are retaken. Perhaps the sedative effect of *fatigue* may in some degree explain this. At Mettray, one great principle is that the boys be thoroughly occupied and thoroughly fatigued. We doubt not, on the contrary, that the garrets and cellars, by inducing disease, engender crime. Scrofula and other asthenic states thus developed, at once predispose to illness and vice. By curing these diseases, a prisoner may be sometimes converted even before his arraignment; and if he were then dismissed, he might at once become a useful member of society. We will quote our lawyer's opinion on this point.

"If to the early rising, regular employment, cleanliness, proper temperature, good ventilation, and sufficient and wholesome diet, were superadded plenty of work in the open field, the indulgences, under proper regulations, of the natural desire for companionship and the stimulus of hope, I am convinced that a high degree of physical health might be attained, and that the moral health of the prisoners would also be promoted."—p. 262.

Breathing the carbonic acid of so many pulmonary systems invariably reduces the mind's energy; and a change in the current of air may in a moment change the current of thought. The bracing air on the mountain top will, we know, fling a *couleur de rose* on all around, creating, indeed, a sort of mental elysium, far more healthful than the fumes of opium.

If we contrast the habits of industry with those of sloth and sluggardism, which passes in bed perhaps fifteen hours out of the twenty-four, we perceive the woeful difference. John Howard's words are, "Make men diligent, and they will be honest."

From the sympathies between the cerebro-spinal system especially, and the digestive and assimilating organs, it follows that the psychological condition is, to a certain degree, dependent on dietetic rules; and we believe that the economical will be proved the most salutary, as it is the most penal.

In one of the slightest sensibility, the stomach, during the anxieties and doubts of incarceration and future penalties, can bear and dispose properly of little: the ingesta should therefore be light, and also occasionally *changed*, for organization, like the intellect, requires novelty. A long repetition of the same food will occasion loathing, and consequent debility. Oatmeal porridge may, however, still form the staple article of diet. The peasants of Scotland take little else, and we have proved its agreeableness as well as high nutrient property in children especially nurtured in Scotland. According to the assurance of Mr. Hill, the individual dietetic cost per day is 3*d*. The constituent part and properties, indeed, of farinacea, are close upon those of animal fibre. We may add that the Irish labourer, even under heavy work, often takes little more than potatoes and water. Probably the explanation of this will be that he is, psychically considered, a mere animal, and all his vascular and nervous energy goes to alimentary organization.

Almost synchronously with the conversion of lunatic asylums into psychical hospitals, we have, as we have hinted, the conversion of prisons into schools. It is the most important psychological adoption of the age.

The prisoner must, we think, at once feel the superiority of learning to read over the labour of the treadmill. In most it will increase self-respect, while both devout and secular instruction may be instilled imperceptibly into the mind, still, however, forming a modified punishment.

Mr. Hill approves of constituting prisoners tutors and monitors over others. We fear, however, that in this respect the wish for salutary results may often be father to the thought! The Rev. Mr. Russell affirms that "crime is but a matter of instruction:" and the fear that crime is so prone to steal out almost imperceptibly, would persuade us from the recommendation or adoption of such a mode, except under restricted and very inquisitorial regulations.

In *young* minds, doubtless, the *pride of progress* is excited very early, and if this stimulus take the right course, a boy may not only like his school, but become ultimately useful. We take pleasure in quoting an anecdote from Sheriff Watson, the distinguished founder of the schools of Aberdeen, on this point.

"The schools are all in a flourishing condition, the attendance

regular, the work and education satisfactory, and the discipline perfect. The other day, when the doctor was making his last visit to a child who had had fever, he found her in tears; on asking what was the matter, the mother replied, 'Indeed, doctor, she is breaking her heart to get back to school, and you must let her return to-morrow.'"

Among the lowest, even in the ragged schools (and we have just now witnessed such a truth), the ambition of being *high up* is an immense stimulus; the most ardent desire is constantly evinced to answer a question first.

Regarding the mode of *religious* instruction in chapel, the author quotes the following evidence of Mr. Reynolds in favour of *open* pews. We repeat it, as it forms an interesting evidence of a long train of serious thought coursing through the mind, even if that had been characterized by obduracy:

"I am happy to state that the removal of the stalls during the past year has been attended by no injurious consequences, while it appears to have answered all the good ends for which the removal had been considered desirable. The prisoner now feels that he is in a house of prayer, engaged in social worship, treated with reasonable confidence, and permitted to hear the offers of divine mercy, without galling marks of his degradation being continually presented to his eye."

The effect of this public religious instruction may be much enhanced by voluntary lay visitation, and exposition of scripture. But we perceive that the testimony even of chaplains is decidedly in favour of blending entertaining literature from a well selected library with the sacred and devout. To these salutary modes may be added the periodical visits of good and exemplary relations, and the habit of correspondence by letter. Of this prisoners are often very proud; and even in the lowly the occupation absorbs for a time the whole thought, so that Satan "finds no mischief still for *idle* hands to do."

All this will go far to induce cheerfulness *from a proper source*: a condition which so much aids the improvement of mind as well as body, for a "merry heart is the life of the flesh."

The effect of wise and judicious government requires, of course, no advocacy: it will be expected that the mind and heart will thereby become soothed and encouraged, and *attachment* even constantly induced. As some proof of this, we will quote from our author the expressions both of a recreant and faithful mind.

"Some prisoners appear to suffer more from the sense of shame in again encountering, after recommitment, a governor who has been kind to them, than from any other part of their punishment. 'All his care

has been thrown away,' 'He'll have no hope of me,' are not unfrequent expressions."—p. 308.

"In a letter from a liberated prisoner who is now doing well, the writer, after grateful expressions to many of the officers for instruction in sewing, reading, &c., which she had received in prison, and for the good advice given to her, said, 'Indeed, I was treated with love and respect, which made me think on the evil of my ways, and resolve and endeavour, by God's grace, to renounce them.'—p. 310.

On the contrary—

"If the prisoner has been subdued merely by fear, and by a force not addressed to his *reason*, the probability is that on the pressure being withdrawn even for a short time, he will resume his old practices (though probably not on the same spot), and that with a fresh spirit of hostility and recklessness. So, also, if he has been treated, though not with harshness, yet like a child in leading-strings, without any cultivation of the powers of self-control, and still less those of virtuous self action, although he may conduct himself in an exemplary manner in prison, and leave with a sincere desire to live honestly and respectably, he will be so wanting in the power to provide for himself, and to resist temptation, as probably soon again to fall into crime."—p. 285.

Now, if this sort of academic imprisonment be so beneficial to the adult, how much more will it be to the impressible organization of youth. It is far easier "to teach the young idea how to shoot" than the old.

"The success up to this time of the juvenile prison at Mettray has already been mentioned. Great success, also, appears to have attended several institutions in America, which, although called 'houses of refuge,' seem to be, in fact, juvenile prisons. A large proportion (more than two-thirds) of the children who are sent to the juvenile refuge called the Kanke Haus, near Hamburgh, are found to live honestly after they leave, as is the case with the majority of children at the Industrial school at Aberdeen. Again, the large number of boys at the prison in Glasgow, who were found to do well after liberation, under but a slight amount of superintendence kindly extended to them by some Sunday-school teachers, and the fact that of fifty young persons to whom, in the course of two years, the governor of that prison had advanced a little money, some tools, and the materials for labour, forty-eight paid back the whole that had been lent them, as mentioned in my seventh and eighth reports, show how much, under moderately favourable circumstances, may be hoped for from the young."—p. 325.

The Christian spirit that first suggested and established the *farm* system, *fermes hospices*, was Pestalozzi, of Zurich, and the blessings of this early training form a most interesting psychological truth, that a penal institution, paradoxical as it may appear, may form under judgment a school of morals. From his work on "National Education" the author quotes this passage:—

"The first practical knowledge inculcated on a novice" (at Hackney-Wick) "is, that his comforts in life will depend mainly on his own exertions; nay, if he indulges in idleness, he may want the very *necessaries* of life. He is informed at the onset that he will have to labour to earn at least a part of his maintenance, before he will have food to eat. Few even of the dullest can be proof against the demonstration."—p. 331.

These elements of success are the principles of the Philanthropic School at Red Hill, so ably superintended by Mr. Sydney Turner, which institution, indeed, formed the model of many of the regulations since adopted at Mettray. It is a pure psychological principle. The boys are "*put on their mettle*," an honest pride and ambition are excited—it is a system of *moral* reward and punishment. We have heard of children who have grumbled out that "it is of no *use* to be good." Such callous and heartless sentiments are not uttered at Red Hill.

In this and other similar institutions, *tickets of credit* are preserved and cherished as a valuable treasure; and we believe the recording angel is far more busy than the accusing spirit even in the memoranda of the "Black Book." The reverend superintendent at Red Hill says:

"This record gives to their actions a sort of perpetuity, the idea of which operates with wonderful force as an incentive to a laudable, and a preventive of an improper conduct. Those who would despise a flogging are kept in awe by the black book (as the calendar of faults is named); and this simple mean has already produced an astonishing effect in the manner of these children, and almost removed every trace of their former evil propensities."—Mettray, p. 23.

Thus is established the immense superiority of psychical influence over mere bodily or *somatic* feeling; and indeed, it almost sanctions the adoption of a brand as a more potent infliction than the gallows. Yet we still acknowledge that, with the callous and obdurate, perhaps the only inducement to good behaviour in a prison, is the dread of *something worse*. Thus, at Mettray, a prison with less stringent rules, one of the chief sources of obedience is the dread of being sent to La Roquette, in Paris, where a dark cell and semi-starvation stare the criminal inmates in the face.

We believe we have thus fairly analyzed our author, and expressed an *epitome* of our sentiments on this important subject. The deep investigation, accurate observation, and practical comments of Mr. Hill, are most valuable. We express our firm belief that he has laid the foundation for a very great amount of improvement in the construction of the criminal code.

ART. IV.—GENERAL PARALYSIS OF THE INSANE.

It is a singular fact that, notwithstanding the deeply interesting nature of the subject, only one monograph on the General Paralysis of the Insane (the treatise by Dr. Winn) has appeared in this country; whilst on the continent, not less than five monographs have been published during the last thirty years. Dr. Winn's treatise, published in 1848, and previously printed as an original article in the "Psychological Journal," contained a full account of all that was known respecting the causes, symptoms, progress, and pathology of this peculiar disease. Since then (1848), three fresh works on general paralysis have issued from the French press. The most recent of these, from the pen of M. Jules Falret* (son of the well-known physician to the Salpêtrière), contains a good digest of all that has been written of late on the subject, and as a methodical and comprehensive treatise it will be found of service; the practical physician will, however, regret to notice that the author's speculative remarks are more numerous than his clinical observations.

Much confusion and a variety of conflicting opinions prevail on the continent respecting the nature of general paralysis, and it is not easy to determine, from the statements of foreign writers, what they precisely mean by their various descriptions of the disease. M. Falret attempts to clear up the difficulty. He says:

"Relative to general paralysis, there are four leading opinions: one, the most ancient, advocated by Delaye, Calmeil, Georget, and also by Esquirol and the greater number of his élèves, implies that the disease is a simple complication or termination of any kind of insanity; another opinion, supported by Bayle, Parchappe, and Duchek, of Prague, represents the affection as a distinct special form of mental disease, characterized at the same time by physical as well as mental symptoms, and by anatomical lesions; a third notion, conceived by Requien, Bailarger, Lunier, and Rodrigues, confounds, by means of one symptom, that of paralysis, those cases which are, and those which are not, attended with delusion, under the name of *progressive general paralysis*; lastly, the fourth view, supported by Sandras, Briere de Boismont, and Duchenne du Boulogne, recognises two principal kinds of general paralysis; one, in which the paralysis is associated with insanity; the other, in which the paralytic symptoms are unconnected with any signs of mental aberration."

M. Falret follows up these statements by a query—

"Are there two kinds of general paralysis, the one *with*, the other *without*, insanity, or is there only one form of the disease?"

* Recherches sur la Folie Paralytique et les Diverses Paralysies Générales. Par Jules Falret, Docteur en Médecine, ancien Interne des Hôpitaux et Hospices Civils de Paris. 1853.

This point, he thinks, might be determined by a comparison of the cases in asylums for the insane with those in ordinary hospitals. It would however appear, from the cases which he has appended to his treatise, and to which we shall have occasion to allude, that the experience to be gained from general hospitals, with respect to general paralysis, is of the scantiest and most inconclusive kind. M. Falret is forced to admit that, in our present state of knowledge, it is impossible to decide whether there is a form of general paralysis which may exist independent of insanity, and he contents himself with an inquiry into the nature of the general paralysis of the insane, and to which he gives the name of paralytic insanity, but which we think less definite than the term in common use. We shall, however, in this review, adopt the author's designation, as it may help to define his particular notion of the disease.

M. Falret divides his treatise into two parts. In the first, he endeavours to show that paralytic insanity is a special form of disease, characterized not only by anatomical lesion and by the special phenomenon of the paralysis, but also by its psychical symptoms and by its peculiar mode of progression. In the second part he takes a rapid review of the various maladies which might be confounded with paralytic insanity, in order to discriminate between them and the particular malady more especially under consideration.

M. Falret, *en passant*, moots the following question:—"Is there," he says, "another and totally distinct form of paralysis, which would merit the term of *progressive*?" This point, he thinks, cannot be determined in the present state of our knowledge.

The following remarks by the author are extremely judicious:—

"It is not necessary to establish the fact that paralysis precedes, in nearly every instance, the accession of mental derangement, in order to prove that paralytic madness is a special affection and not a termination of every kind of insanity. In fact, the proposition advanced by MM. Baillarger and Lunier does not appear to be generally true. They have advocated the anteriority of the symptoms of paralysis; our observations, on the other hand, would lead us to suppose, as a general rule, that the mental derangement and the paralysis have a simultaneous origin, although in many instances the affection of the mind precedes, for a longer or shorter period, the manifestation of the paralysis."

M. Falret concludes this part of the subject with the following propositions, which he considers incontestable:

"1st. That this specific form of paralysis is never known to attack insane patients who have been confined for many years in an asylum. If paralysis occasionally attacks patients belonging to this class, it is a totally different malady, and depends upon softening of the brain,

apoplexy, tumours of the brain, or upon affections perfectly distinct from paralytic insanity.

"2ndly. That the insane who die paralytic in asylums, invariably exhibit traces of paralysis on their admission, or very soon afterwards, and that none of these patients survive a period of more than three or four years."

We can vouch for this high rate of mortality, which is rather below than under the truth. Out of 90 cases that were alive twelve months since in one of our large asylums, scarcely a ninth part are now alive.

M. Falret does not profess, in his treatise, to give a detailed description of the course of paralytic insanity; his object is to prove, that in spite of individual differences, the disease presents a generic character. He justly observes that a great obstacle attends an investigation into the nature of the disease at its outset, owing to the difficulty of obtaining satisfactory information in the early periods of its manifestation. The approach of the disease is so insidious that it often makes considerable progress without the relatives of the patients having been in the slightest degree aware of its existence. It is, generally speaking, only at a late period, when the symptoms are sufficiently evident, that the medical attendant has an opportunity of witnessing the progress of the complaint.

M. Falret recognises four varieties of paralytic insanity:—the *congestive*, the more especially *paralytic*, the *melancholic*, and the *expansive* variety. As the author's views respecting these forms of the disease are full of interest, we shall give them at length:—

"1. *Congestive variety*.—Congestion has often been noticed as a precursory symptom of general paralysis, but its importance has been exaggerated. M. Bayle, for instance, asserts that the disease is always marked by giddiness and *d'afflux de sang à la tête*, in addition to more or less impairment of the reasoning faculties. It must be understood that this congestive state has no reference to those sudden attacks of congestion of the brain and of epilepsy which occasionally occur during the progress of the disease. It generally happens that some of the physical or psychical symptoms which characterise the affection, have existed for some time before the explosion of the congestive attack. The embarrassment of speech often becomes more intense after one of these seizures, and the mind becomes disturbed. The accompanying insanity may be marked by excitement or depression.

"2. *Paralytic variety*.—So little is known respecting this form of the disease, that its demonstration is by no means an easy task. It is this very paucity of facts which has given rise of late to so much controversy with regard to the nature of the malady. Occasionally, in ordinary practice, we meet with patients who, without any known cause, exhibit an almost imperceptible tremor of the upper extremities, a difficulty in performing delicate manipulations with the fingers, such as writing, for instance, an irregularity of gait, a difficulty of supporting

themselves on their legs, and a trifling amount of hesitation in speaking. They seem conscious of these defects, and attribute them to some accidental or permanent cause, such as fatigue, cold, or the loss of a tooth. Tremor of the tongue and upper lip are also frequently observable. Vertigo is also a common symptom. Sometimes, as M. Baillarger observes, there is irregular dilatation of the pupils, and impairment of the sexual functions. In general, these paralytic patients appear to be in full possession of their intellectual faculties; but, if they are closely examined, and above all, if the persons who live with them are questioned minutely, we discover signs of impaired reason, even in the first stages of the disease. Very soon, however, the mental disorder becomes fully developed. The habits of the patients are completely changed, and they perform a variety of singular acts, quite inexplicable to those who are acquainted with their previous mode of life.

"The duration of this *état prodromique* is necessarily variable, and may be prolonged for a considerable period. The paralytic phenomena increase progressively. The intelligence becomes weakened, and at length decided symptoms of insanity are manifested. The patient may be either in a state of excitement or depression, but in nearly every instance the mental disorder is marked by ideas of grandeur or by self-satisfaction.

"3. *Melancholic variety*.—It is generally supposed, when paralytic insanity commences with mental disorder, that it invariably gives rise to a change of habits and character, and is accompanied by great mental and physical excitement; yet if we inquire minutely into the history of the case, we shall occasionally learn that the patient, before the accession of maniacal excitement, had been in a state of moral depression, and to which some authors, and especially Dr. Duchek, have given the name of *le stade mélancolique*. MM. Bayle and Calmeil frequently allude to the state of melancholy which precedes the appearance of the phenomena of excitation. It is frequently marked by a short intermission, during which the patient resumes his ordinary occupation. This interval is, however, very brief, and is quickly followed by an explosion, as it were, of agitation and incoherence.

"4. *Expansive variety*.—This form, which is the most common, has been frequently described. It may precede or follow any of the other varieties. Its commencement is marked by an excessive activity, which betrays itself in actions and in language. The patient's character is modified or exaggerated; he becomes more active in his profession, and occupies himself at the same time with new pursuits. He sleeps little, and conceives projects which are not altogether absurd, but which can only be realised up to a certain point. He gives himself up to intoxication, to venereal excesses, or to singular actions, which are often dangerous, and sometimes criminal. It is in this variety that the patient commits thefts and other felonious acts, which lead to his arrest. When the patient arrives at this stage of extreme excitement, we often see them a prey to excessive activity, which may terminate in one night, or in a few hours, in maniacal agitation, or in those delusions of grandeur that are so characteristic of the malady."

The temporary benefit obtained by medicine in this disease is often so striking as to lead medical men to suppose that they have cured cases, when speedy relapses too often show how fallacious have been their conclusions. M. Falret does not deny the possibility of a perfect cure, and he instances a case of M. Fevrier's which had not relapsed during a period of twenty-five years. He, however, believes that in many instances the supposed recoveries were merely examples of intermission. In one case of his own, the intermission lasted a year and a half. In the practice of his father, at Salpêtrière, he has frequently seen the most marked remissions follow the application of the actual cautery to the nape of the neck. M. Baillarger, in his clinical lectures, has pointed out the frequent disappearance of the delusions in the course of the disease; he, however, considers that the paralytic symptoms, and especially the embarrassment of speech, never wholly disappear, and that they evince, by their presence, the persistence of the disease. M. Falret relates, on the authority of Dr. Coindet, of Geneva, an interesting case of paralytic insanity, in which the disease, after having been remarkably intense and characteristic, was so completely suspended for a period of five months, that the medical attendant was only once able to detect a very slight embarrassment of speech, and this did not occur until the close of the intermission. The recurrence of the disease was marked by epileptiform attacks, which terminated the patient's existence at the end of a month.

It is generally admitted that the mental disorder associated with paralytic insanity, may appear under three principal forms—viz., monomania, mania, and dementia. M. Falret, however, asks this question: "Is it not possible, by penetrating beyond the external manifestations of this disease, to discover a special character in the form of insanity which accompanies general paralysis, and which distinguishes it from that of any other species of mental affection?" M. Baillarger inclines to this opinion: "The ordinary monomaniacs," he says, "differ from the paralytic monomaniacs by the obstinacy with which they retain their ideas; the paralytic, on the contrary, on account of the feebleness of their memory, have no coherence in their ideas, and they constantly contradict themselves."

M. Falret's views respecting the character of the insanity which is associated with general paralysis, is extremely faulty as regards arrangement. He has fallen into an error so common to a youthful, ardent, and imaginative Frenchman—that of unnecessarily subdividing and complicating his subject, until all idea of unity is lost. He has, for instance, divided the evolution of the insanity into three distinct phases, which he terms the period "*d'incubation ou de production des idées délirantes*," the "*période de systematisation*," and the "*période es-*

sentiellement chronique de l'alienation." All this may appear very scientific, but it is decidedly unphilosophical.

We have no doubt that ambitious or exalted monomania is the form of insanity more commonly associated with paralytic insanity. Generally speaking, it is some mental eccentricity which has first attracted the attention of the patient's friends, his bodily infirmity having been quite overlooked. The patients speak of their fortune and grandeur, that they are able to make considerable purchases, and build palaces. Everything is transformed into gold or silver; and the very pebbles are precious stones, which they hoard with care. Some consider the asylum as a magnificent palace, the persons around them as only there to wait on them; and the strangers who come to visit the institution are regarded as petitioners for their powerful influence. Others consider their detention as a shameful injustice, opposed to all laws, both human and divine. They promise thousands to the physician for their release, and they seek to corrupt the keepers by signing bills for enormous sums of money. One fancies he is a king or an emperor, and exacts homage; another imagines himself to be a deity, requiring adoration. In an asylum containing patients suffering from general paralysis, we find in imagination barons, peers, generals, physicians, astronomers, poets, men who know everything, even to the secrets of Providence, and whose power is such as to give motion to the universe. In the second period of general paralysis the patients have the same ideas of grandeur, but the insanity is more general. Ambitious monomania, however, does not invariably accompany paralytic insanity. The insane aspect varies very much in different individuals, and in the same person at different times. The disease generally begins with mania or monomania, and ends in dementia.

M. Falret, in the second portion of his work, deprecates the tendency evinced by recent authors to unite under the head of general paralysis or progressive paralysis, facts which differ strikingly from each other, whether we regard the general symptoms, the progress of the malady, or the peculiar paralytic features of each individual disease. He then proceeds to notice the various diseases liable to be confounded with paralytic insanity. He begins with affections of the brain.

"Cerebral hæmorrhage.—When the invasion of this disease is sudden and accompanied by hemiplegia, there is little probability of its being confounded with paralytic insanity. Very often the intellect is unaffected, and the embarrassment of speech is persistent. The only cases of cerebral hæmorrhage which are likely to lead to an error of diagnosis, are those in which a less intense paralysis of one half of the body supervenes upon an old hemiplegic attack of the opposite side. This generalisation of the paralysis is generally attributed, by authors, to an effusion of serum upon the brain or into the ventricles, and which is consecutive to the primitive lesion."

“Softening of the brain.”—The diagnosis, in some instances, between this affection and general paralysis, is much more difficult than between the latter disease and cerebral hæmorrhage. * * * The signs which especially distinguish softening of the brain from paralytic insanity, are as follows—intense and continued headache, frequent vomiting, violent pains in limbs, cramps, and occasional numbness of one side of the body. Embarrassment of speech rarely occurs, but when present it is more marked than in paralytic insanity. The intellect is generally unaffected, but the memory is frequently impaired. Anæsthesia and hyperæsthesia more commonly occur in this affection than in paralytic insanity. Moreover, the indications to be derived from the course of the disease must not be overlooked. The progress of softening of the brain is often rapid, and the invasion of the disease is frequently sudden. The paralysis and impairment of consciousness does not generally supervene until after one or more attacks. The course of the disease is much more rapid than that of general paralysis, and the patients seldom survive more than a few months.”

“Tumours of the brain.”—The principal characteristics which distinguish cerebral hæmorrhage and softening, apply with equal force to tumours of various kinds, tubercle, cancer, cysts, exostoses, syphilitic nodes, &c. * * * Tumours of the brain have ordinarily a long duration and a slower development than paralytic insanity, although the evolution of the latter disease is remarkably slow.”

“Meningitis.”—The progress of *acute* meningitis is generally so extremely rapid, that the possibility of confounding it with general paralysis is extremely slight, unless, as some authors assert, there be a form of *acute* paralytic insanity; this, however, is extremely problematical. * * * The assimilation of these two affections appears to have been owing to a mistaken identity or to anatomical lesion. It is possible that during the progress of general paralysis meningitis may ensue; should this, however, be the case, the occurrence must be merely considered in the light of an accidental complication.”

“Affections of the spinal cord.”—Very little reflection will suffice to show that this disease bears only a partial resemblance to paralytic insanity. Medullary paralysis is almost invariably paraplegic, and if general paralysis ensues it supervenes solely as a secondary affection. There is, moreover, neither disorder of the intellect nor embarrassment of speech.”

“Nervous paralysis.”—Since modern anatomical researches have discovered in the nervous centres the origin of the greater number of paralytic diseases, we are little disposed to acknowledge the existence of any affection of the nervous system which is unassociated with lesion of some part of the brain or spinal cord; nevertheless, a certain number of these maladies have been classified by the best authorities, as a distinct and peculiar species of functional disease. They may be divided into two classes—those paralytic cases which depend on epilepsy, hysteria, chorea, &c., and those which are the result of poisoning from alcohol, lead, mercury, &c.”

“Paralysis from the effects of lead.”—It is possible that persons who have been long exposed to the influence of lead, may be attacked with

symptoms closely resembling paralytic insanity, but this must not be confounded with the true general lead-paralysis, which constitutes a special disease. We have met with two cases of general paralysis which appeared to have been occasioned by lead. In one, there was a complete paralysis of all the members of the body, but the case differed in several respects from one of paralytic insanity. The affection occurred in a young man who was at first attacked with paralysis of the extensor muscles of the forearms. For these symptoms, electricity and transcurrent cauterisation were employed in vain, under the direction of M. Brichteau. A year afterwards the paralysis had extended to the thighs and the trunk of the body. He died suddenly, and a post-mortem examination revealed softening of the superior part of the brain."

"*Mercurial trembling.*—The action of mercury has been supposed to be a cause of the paralysis of the insane, but the arguments which have been brought forward in proof of this opinion are extremely questionable. Mercurial paralysis has *un cachet tout spécial*, and notwithstanding the analogy of some symptoms, the diseases cannot be considered as identical."

"*Paralysis from the effects of alcohol.*—This affection bears a closer resemblance to paralytic insanity than any of the preceding diseases. We do not allude to acute delirium tremens, but to the affection which Dr. Huss has termed *alcoholismus chronicus*. * * * The first phenomenon which commonly exhibits itself in those who indulged to excess in alcoholic drinks, is trembling of the hands, which is more manifest in the morning than in the evening. It is also most conspicuous after numerous excesses, or after the sudden deprivation of the stimulus to which the system has become accustomed. For a long period this trembling is, in many drunkards, the only symptom produced by the abuse of alcoholic liquors. Not unfrequently, however, they are attacked with headache, vertigo, and dazzling of the sight, which obliges the patient to lean for support on any object near at hand. The digestive organs are frequently deranged at the very outset of the affection, and a vomiting of mucus often occurs in the morning. After a while, if the abuse of alcohol be continued, we notice the first symptoms of alcoholic paralysis, and which have been so well described by Dr. Huss. Formications in the upper and lower extremities, numbness in the fingers and toes, and cramps and pains of the limbs, are amongst some of the commonest signs of the disease. All these phenomena of muscular and nervous weakness are generally confined to the extremities, and seldom extend above the neck. At the same time the brain becomes the seat of abnormal symptoms, indicated by giddiness, indistinct vision, and *muscæ volitantes*. * * * Many symptoms of chronic alcoholism resemble general paralysis at their outset. The former disease, however, differs from the latter by the fact of the paralysis generally commencing with a numbness of the toes and fingers before these organs become decidedly weakened. In general paralysis, on the contrary, the lesions of motion generally affect the whole length of the members, and, moreover, they do not always commence in the

extremities. * * * The impairment of the mental faculties in alcoholic paralysis is marked by a state of hebetude, especially after the full development of the paralytic symptoms. The memory is also greatly weakened, and the patient forgets the most important incidents in his life. He is often, however, quite conscious of his mental and physical defects. He is generally low-spirited, and often hypochondriacal. The illusions of sight are also extremely characteristic, but the patient is often aware of the unreality of these phantasms. In addition to these false perceptions of sight, which may be extremely various, the invalid is troubled with the same spectra in his sleep, and it is a peculiar feature of alcoholic intoxication, that the patient is unable to distinguish the illusions which occur during sleep from those which happen when he is awake. * * * Decided intermissions or remissions moreover occur much more frequently in alcoholic paralysis than in the general paralysis of the insane."

"Progressive Muscular Atrophy.—The diagnosis between muscular atrophy and paralytic insanity, when it has been ushered in without incoherence, is not an easy task. The absence of insanity at the outset of the disease, the more or less rapid development of maniacal excitement, the absence of embarrassment of speech, except perhaps towards the close of disease in one instance or at the commencement of the affection in another, are the points to which attention must be directed in our endeavour to arrive at a correct diagnosis."

Dr. Winn has, in the treatise to which we have previously referred, drawn attention to the remarkable resemblance which paralysis agitata bears to paralytic insanity. Shaking palsy often commences imperceptibly, and progresses slowly; it may commence in the head or in the arms, which may remain affected for years; after a while the paralysis extends to the legs, which become weak and tremulous, and unable to obey the will; at a more advanced period the power of speaking and eating is lost; the urine and feces are passed involuntarily; coma at length ensues, and terminates in death. Although the two diseases are distinct, there is nevertheless a remarkable coincidence in many of the symptoms. It is also a remarkable fact, that induration of some parts of the nervous system has been discovered occasionally in both diseases.

M. Falret concludes his observations with the following inferences:

"1st. If, by the words General Paralysis, it is intended to designate a disease characterised by other phenomena than that of paralysis, then there is only one species of this affection which has, as yet, been scientifically demonstrated. 2ndly. If, on the contrary, we merely understand by this title a symptom which can supervene on various diseases, it must be admitted that there are not only two, but many kinds of General Paralysis; that there exists, for instance, the apoplectic, the epileptic, the saturnine, the alcoholic, and the atrophic forms of General Paralysis."

Nowwithstanding all that has been advanced on the continent to the contrary, we are inclined to consider that the disease commonly termed in this country "the General Paralysis of the insane," is a distinct and specific form of paralysis, having a peculiar origin, progress, and termination. The question, after all, can only be determined by experience and an appeal to facts, and much more research is required before a positive opinion can be formed on the subject.

The cases which M. Falret has appended to his treatise are extremely few. They are only ten in number. Four of these were cases of General Paralysis accompanied with ideas of grandeur. Three were instances of alcoholic paralysis; one was a case of muscular atrophy; and one afforded a good example of saturnine paralysis. Perfect recovery only occurred in one instance, and that was a case of alcoholic paralysis associated with delusions and hypochondriasis. He only gives the results of three post mortem examinations, and these present nothing noticeable.

M. Falret is evidently a shrewd and clever man, and has certainly done good service to psychological science, by the industrious and methodical manner in which he has given us an exposition of the various opinions which have agitated our continental friends of late, with regard to the various and complicated phenomena of an obscure and singular malady. We could have wished that M. Falret's treatise had exhibited marks of a more extended experience; this is, however, a fault which we hope to see corrected when he next appears in print, and we trust, from some words which have fallen from him in the commencement of his thesis, that it will not be long before we have the pleasure of renewing our acquaintance with an author who, from position and capacity, is admirably qualified to investigate the nature of one of the most interesting subjects that can possibly engage the attention of the physician or the psychologist.

ART. V.—LOGIC AND PSYCHOLOGY.*

THOUGH logic has been cultivated as a science from the time of the Greek civilization, and maintained its place in the curriculum of learning, when the human mind was making but little progress in branches of knowledge which have been matured in after ages, nothing can be more yague, as our author complains, than the manner in which

* *Prolegomena Logica: An Inquiry into the Psychological Character of Logical Processes.* By Henry Longueville Mansel, M.A., Fellow and Tutor of St. John's College, Oxford. Whittaker and Co.

logic has often been treated, even in recent times. The fact is, that the subject has been looked at from so many different points of view, and has been so mixed up with matters not strictly belonging to it, that any attempt which may tend, on a philosophical basis, to promote its elimination from extra-logical incumbrances, and to place it on a more satisfactory footing, may be regarded as a benefit to science. Such an attempt is the work before us; and whatever has been the result, we can assure our readers that the book is written with no ordinary ability for such discussions as it contains.

The author's design is to exhibit more fully the relations existing between logic and psychology. The work is not an introduction to logic; indeed, it presupposes in its readers some idea of the subject, beforehand. It aims at what is, in the order of nature, prior to logic, though of later scientific development—an inquiry into the constitution and laws of the faculty of thinking, as these laws are necessarily assumed by the logician. Many German writers have elaborated formal logic, but their labours are little known in this country; and the nature and scope of the science are often but loosely apprehended, in consequence of the failure of regarding it sufficiently in a psychological point of view. To this failure, our author attributes largely the confusion of systems which the very term *logic* still calls up in the minds of those who are in any degree imbued with the literature of the subject.

"We have recently passed a statute [at Oxford] enacting that a proficiency in logic is to have considerable weight in the distribution of honours. But the present state of logical literature is not such that the mere mention of the subject is sufficient. What logic does our statute recommend? Is it Aristotle?—is it the Schoolmen?—is it Bacon?—is it Aldrich?—is it Archbishop Whately?—is it Mr. Mill?—is it Mr. De Morgan?—is it Wolf?—is it Kant?—is it Hegel? Most of these already exercise some indirect influence on our studies and examinations, and it is merely the want of good translations that saves us from being overwhelmed by an additional mass of incongruities from Germany."

Mr. Mansel insists, that the only way in which the formal view of the science, which has been gradually advancing to perfection since the days of Kant, can be rendered thoroughly complete, is by a more definite study and appreciation of it in connexion with its undoubted psychological basis.

Hence the work before us consists of a series of psychological criticisms, mainly limited to logical questions, but many of them, nevertheless, of high interest to the student of general psychology; for the author has discussed the various points which he has selected, with an acuteness and analytical power which must at once rank him

with the ablest writers on the subject, whether we follow him or not in all his theories and conclusions. It is evident that he has well studied the Kantian speculations, and that he has surveyed them with an intelligence too great to allow him to be either a blind partisan or an indiscriminate opponent. From having ourselves, in an humble way, for some time past, officially attempted something towards introducing the student of general psychology and logic to an historical acquaintance with the main doctrines of Kant, we were glad to find our private estimate of this greatest of the German metaphysicians so much corroborated by the opinion of our author; we say *greatest*, not by way of pronouncing on the degree of genius or invention which Kant may be supposed to have possessed, in comparison with a few other men who are accounted stars of the first magnitude, by their countrymen, in the hemisphere of philosophy,—but simply because Kant knew better *where to stop* than either Leibnitz, or Fichte, or Schelling, or Hegel; not to add that the whole school which came after him owes to him its impulse, far as it deviated from his track.

“The reader who is familiar with Kant’s writings will probably discern obligations to the Critical philosophy in almost every page, even where the language of Kant has been departed from, and the difference in detail is such as would not justify a direct reference to his works. The method and material for thinking derived from the study of the Kantian philosophy, is in many respects far more valuable than the direct information communicated. This is the case especially with a student who views that philosophy from the psychological, rather than the metaphysical side, in its relation to Hume and Locke, rather than to Wolf and Leibnitz; and who endeavours to combine the materials thence obtained with the most valuable results of the Scottish philosophy, which owes its rise, like the Kantian, to the scepticism of Hume.”—*Preface*.

As compared with Kant’s view of logic, our author’s (which aims at being very strictly formal, and not applied or mixed in any degree) would base itself on more limited notions of the provinces of understanding and reason than even those of Kant himself. From the view taken of the office of logic in the Eclecticism of Cousin, of course he widely differs; for, as he justly observes, this system “approaches, in aim at least, if not in method, nearer to the philosophy of Schelling and Hegel, than to that of Kant.” Yet, with a candour which reigns through all his pages, and which is studiously desirous of giving to every one his full due, our author is liberal in his acknowledgments of the general benefit which he has derived from the writings of M. Cousin. In the same spirit Mr. Mansel expresses that he is much indebted to the writings of Sir William Hamilton, though by no means uniformly agreeing in his opinions. In closing the general statements

of his preface, our author, for the sake of clearness, pleads for some latitude in affixing meanings to words—we mean the right to adopt, if necessary, new terms, and to put a new interpretation on old ones, according to the Aristotelian maxim—*ὁροματοποιεῖν σαφηνείας ἕνεκεν*.

The author, in accordance with the views of Kant, treats logic as the “Science of the Laws of Formal Thinking.” Hence the necessity of inquiring into the actual nature of thought as a mental operation, its laws, and the extent of its efficient application. “With these alone, and with no other possible psychological functions, has the logician to do.” He must distinguish between Thought proper, and all other mental phenomena, if he wishes for a real basis for his science. Two elements at least are implied in every state of consciousness; “a conscious subject, and an object of which he is conscious.” This object may or may not, in any given case, involve the existence of an external world, such as is commonly understood. The object may be distinct from *self*, or it may be a modification of ourselves—that is, of our own minds. All that our author here contends for is, that there is present in the act of thought such an individual object, “whether thing, act, or state of mind,” and that we are conscious of such object (thus interpreted) as existing within or without ourselves. Hence whether, with Sir W. Hamilton, we admit an ontological (“natural”) dualism or not, at all events, a psychological dualism is implied in the very notion of consciousness. We suppose that the author would regard his theory as not more independent of all the forms of the Peripatetic idealism than of the Berkleian, or the modern German—contending only that, in thought, we are *conscious*, and conscious of *something*, be it what it may. This *something* is simply to be distinguished from our consciousness of it.

But, in thought, there is more than the above. A being is conceivable whose successive states of consciousness might leave no trace or memory of them behind: he would then have no knowledge of such objects “as referred to separate notions.” He could not say, “What I see is a man, or a horse.” He would be wanting in the distinctive feature of thought—namely, the concept or general notion resulting from the comparison of objects. Hence the importance of distinguishing *intuitions* from *thoughts*. The term intuition is used by Mr. Mansel in the German sense (*anschauung*), so as to include all that arises in connexion with the perceptive faculties (whether of external or internal objects) or from imagination—to include every act of consciousness which has for its immediate object any individual thing, state, or act of mind, presented under the condition of separate existence, either in space or time, or both. In *intuitions*, such objects, or *quasi* objects, are immediately related to the conscious mind: in *thoughts*, the object

is mediately related to it through a concept gained by comparison. The act of thought and its object are here distinguished, as in the *rônoic* and *rônua* of the Greeks, the former answering to our term conception, and expressing a mental act—the latter to the term concept, of established usage in the French Eclectic school, and now much used among ourselves as a convenient abbreviation, expressing the object of the act. Sir W. Hamilton, whose theory is the same, in like manner distinguishes “an absolute or irrespective (*immediate*) cognition,” from the “mere relative and mediate knowledge which subsequently we compass of the same object, when, by a comparative act of the understanding, we attach it to a class, that is, think or recognise it by relation to other things, under a certain notion or general term.” An intuition thus contains but two elements—subject and object, in present relation to each other: a thought has three elements—the thinking subject, the object thought on, and the concept as a medium to both. In mere sensible intuition, the senses present no distinctions—a landscape is only to them a single object whose parts are confused: to distinguish trees, fields, houses, &c., requires a comparison and classification of the parts relatively to so many separate concepts existing in the mind; and such classification is an act of thought; so that thought exists whenever the senses present objects to us, in ordinary, with our faculties awake and attentive. When I say—That is a tree, that is a flower, there is both intuition and thought.

Hence a further distinction: all intuition is direct and presentative—all thought indirect and representative. For in every act of consciousness, the ultimate object is an individual; and in intuition the object is presented to the mind directly and *per se*, irrespectively of anything but itself: in thought, the individual is presented by means of a concept which contains attributes also belonging to other like individuals. The concept, therefore, is a general notion, the result of prior presentations. The isosceles triangle drawn on the paper before me, and which is pictured on my retina, is an intuition; my notion of it as triangle merely, having the common properties, is a concept.

Mr. Mansel fully adopts Sir W. Hamilton's doctrine of perception, which discards every modification of the theory that our cognisance of external objects, as such, is the mere result of a representation of them in consciousness—and maintains that we are *conscious* not only of our own (subjective) sensations, which none dispute, but that we are also *conscious* of the external object. The question, of course, here is, whether (be the external object what it may in itself) we can be said to be conscious of it, in the same sense in which we are conscious of a certain change in our mental state? Is my knowledge of this change in myself the same kind of knowledge which I have of the supposed

cause of that change? This point appears to us not to be sufficiently cleared up in the acute speculations of Sir W. Hamilton, nor in those of the author.

Perception (sensitive) is, according to him, synonymous with intuition of external things—internal intuition relating to mental states or acts, as objects taken cognisance of as being in the mind. Yet he admits that the usual exercise of the senses on objects does not consist of mere intuition, but is accompanied by an act of thought. According to this, perception would seem to include the latter, which, however, is contrary to the author's theory, which limits perception expressly to what is presentative only, whereas thought is representative. Again, he defines imagination, as a product, to be the "consciousness of an image in the mind resembling and representing an object of intuition, and being both presentative and representative." But is there, then, objectively, any difference, according to the author's own previous theory, between the intuition of an external object and a product of imagination as above described, excepting that the former is a case of "external," and the latter of "internal" intuition. We think the author should have somewhat more elaborated his doctrine, or at least his language, regarding perception, and have more sharply distinguished the cases to which he would apply the terms intuition, perception, thought, and imagination respectively. For, while he expressly limits perception to intuition, or to presentative consciousness, he speaks, nevertheless, of the "exercise of the senses upon present objects" (sensitive perception, we suppose) as "not *consisting* of mere intuition," and of imagination as being both presentative and representative to consciousness; while he at the same time characterizes representative power as a function of thought only, though it is not easy to see wherein an image raised in the fancy differs in the consciousness of the moment from the intuition of external perception, except in being "internal." Even granting that an object of external intuition were always consciously represented, when there is an image in the fancy, which we doubt, this representation is not of the kind which our author claims in concepts—namely, a general notion gained by comparison and classification, or what he terms an act of thought. Our space will not allow us to more than indicate the above confusions, or at least difficulties. We must go on to remark that, after having described thoughts as those states of consciousness in which the object is mediately related to the mind through concepts gained by comparison, and which are not capable themselves of being depicted to sense or imagination, though their ultimate objects are individuals, our author gives, as a second characteristic of all concepts, and illustrative of the first, that they require to be fixed in a representative sign. This

is exemplified in Kant's refutation of Leibnitz's principle of *identitas indiscernibilium*, which is applicable, says Mr. Mansel, to concepts, but not to objects of intuition (query external?). Well and good, if we leave time as well as space out of the account. No doubt, however much alike two outward objects are, they can never be identical, because they occupy different spaces; "whereas my notion of hunger, or fear, or volition, is a general concept, having no relation to one period of time rather than to another; and as such, like other concepts, requires a representative sign." There is, however, a sense not here noticed, in which Kant might have extended his refutation of Leibnitz's theory, by putting concepts on a par with external objects of intuition: for as a concept is not always actually thought, in the mind, but only on occasion, all our concepts may be regarded as so far numerically distinct, as much as the spacial intuitions of sense, since my concept of triangle while I now write is not the same, in point of *time*, as the concept of yesterday, though it may be the same in all other respects.

In pursuing the characteristics of thought, our author holds that language is indispensable even to its formation. On this principle Condillac denied that brutes have any memory, since they have not language. Mr. Mansel would say that memory is not thought, while reminiscence is; and he agrees with Aristotle, that memory is common to man and brutes, but reminiscence peculiar to the former. We can only state, on this subject, that, while fully admitting the reality of the distinction of Aristotle between *μνήμη* and *ἀνάμνησις*, we have always strongly doubted whether what is often called memory in brutes, ought not rather to be regarded as mere association. With respect to the relation of language to our psychological acts, we do not doubt that without the former our range of knowledge would be extremely limited, and that our first infantile knowledge is of individuals whose names we are taught. Nevertheless, language must always, even in its most abstract terms, be, like all other symbols, a sign of *something*. We could never, without an elaborate system of these symbols, have a differential calculus or an algebra, for memory could never build up or retain the high generalizations of these sciences, apart from such marks or signs—yet they must be signs of something, and that something can be nothing but ideas or concepts, agreeably to Mr. Mansel's definition, that thought is the "act of knowing or judging by means of concepts."

Our author's Eclectic Kantism carries him on to another point most important, which is an inquiry into the limits of thought; and he decides, with the great German metaphysician, that it is "only operative within the field of a possible experience; that is, upon such subjects as can be presented in an actual intuition, or represented in an

imaginary one." We regard this principle as deserving of the careful attention of all who would desire to have just ideas of what true knowledge is, as distinct from vague and indefinable ideas. The concept plane-triangle as a right-lined figure of three sides, does not in itself contain those attributes which make any species equilateral, scalene, or right-angled, but it is capable of being combined with any one of the three, either in an actual external intuition, or in an imaginary figure. On the other hand, a right-lined figure of two sides is no concept at all, for it cannot be individualized. Hence the criterion of positive thinking, as distinguished from certain words which are in fact only a negation of thought. We must not mistake words which are in themselves intelligible, for concepts that may be formed and reduced to an actual intuition in sense or imagination. We can understand the meaning of the three words *right-angled equilateral triangle*, but the object is inconceivable. This doctrine is undeniable. With regard to the mental operation called *abstraction*, we agree with the author in getting rid of the objection of Berkeley and Hume to the abstract notion—say of a triangle—namely, that our actual idea (concept) of a triangle must necessarily be particular, and cannot be general; for, as Mr. Mansel remarks, we do in the majority of cases employ concepts (or general notions) as instruments of thought, without actually submitting them to their always possible test of individualization. We can judge and reason about triangle in general, without trying to imagine any particular one. On this account we think that Dr. Thomas Brown's designation of this fact, as an example of "*relationism*," is not amiss—a term which he uses to express that it is simply a certain relation in which all the individuals agree that is the true object of thought in these cases. This view of the matter gets rid of all the difficulties and absurdities of other theories which have prevailed, such as realism, normalism, and conceptualism. Drobisch has observed that abstraction may be viewed either as psychological or logical. We can psychologically fix our minds on some one property common to many individuals, that is, we can abstract in this sense; but we cannot assign incompatible predicates to the same subject as we should do if we tried to think of a triangle that was neither isosceles, nor scalene, nor equilateral, or one that was all three at once. This would be a logical contradiction. So far, and so far only, Berkeley was right.

As thought involves the possible application of concepts, as before explained, to individuals, either as objects of external or of internal perception, our author proceeds further to remark that the "possibility of any branch of scientific inquiry depends on the psychological question—*how many presentative faculties has man?* since every such faculty may furnish distinct materials for thought." The only objects

of science are those which can be in any way presented as objects of an immediate intuition, external or internal. Thus, physical science presents us with material phenomena; moral science presents the inward fact of moral self-approval and remorse on account of an action for its own sake; æsthetics is a possible branch of inquiry, because we have certain emotions on contemplating the works of nature and art.

Our author justly intimates that the psychological distinction which he adopts between what is presented in intuition and what is represented in thought (concept), is so far from original in his own pages that it has been repeatedly marked with greater or less distinctness by modern philosophers. Locke, in the second book of his essay, maintains that it is not in the power of man, by any means, "to invent or frame one new simple idea in the mind;" he can only compound or divide the materials given to him. It has been so much the fashion to disparage our great English metaphysician, throughout, on the Continent, and sometimes at home, and to hold him to a precision of language which, in his day, modern speculative philosophy had still to attain; that we are glad to find the author doing him candid justice, in allowing that his *ideas of sensation* and *ideas of reflection* point correctly enough to the two great sources of external and internal intuition; although it may be conceded that his choice of terms here is not happy, nor always consistent, and that reflection (his second source of knowledge) can only be understood in an improper sense, as being synonymous with consciousness of what is passing within us, as Dugald Stewart accurately remarked. Hume pointed to the same distinction in the sources of our knowledge, terming them, with too little accuracy of explanation, "impressions and ideas;" for he made no other difference between the two than that which lies in their respective degrees of vivacity; on which doctrine Reid smartly remarks, that "it will follow that the idea of a lion is a lion of less strength and vivacity; and here arises a question, whether the idea of a lion may not tear in pieces and devour the ideas of sheep, oxen, horses, men, women, and children."

Mr. Mansel, as may be gathered from what has preceded, entirely agrees with Kant in the result of his attempt to disentangle the confusion which prevailed, before he wrote, respecting *ideas*; and he considers it to be one of the most valuable principles of the Critical philosophy that the understanding has *no power of intuition*; or, as our author explains it, that the act of thought cannot create its own object. Now, we quite agree with Mr. Mansel that thought, as described by him to be mediate and representative, and requiring to be based on an "immediate and presentative fact of consciousness," cannot

create its own object. It is impossible for a man born stone blind, for instance, to imagine the general concept *colour*, for he is utterly unable to refer it to any individual example, as blue, red, or other. Nevertheless, we object to Kant's general doctrine of intuition, because he limits it to sensibility (*sinnlichkeit*), under which he places not only our cognizance of external objects, but even of all the internal modifications of the conscious *ego*. For instance, our notion of time is, according to him, a form of internal sense—a doctrine which has been regarded as one of the most fundamental errors of his system, even by many of Kant's most candid critics, who have justly maintained that such an idea or notion as *time* is exclusively an affair of the understanding, which alone (and not sense) can take cognizance of it.

It is further remarked that, as our knowledge must flow entirely from what our faculties, sensuous or others, can *present* to us, we have hence some light thrown on the distinction between *positive* and *negative* ideas. A positive intuition (a sound, for instance) is one that has been presented to us in actual consciousness; a positive concept (e. g., quadrilateral, apart from its species) is one formed from such presentations. A negative intuition is one that has never been so presented—a negative concept is no concept at all. If I had only seen a red colour, I should have a positive idea (intuition) of it, but only a negative one of blue. I have a positive concept of quadrilateral figure—a negative concept (that is, none at all) of a figure with two sides only. With more candour towards Locke than most who are imbued with the Kantian and the Eclectic metaphysics, our author adds:

“When Locke declared infinite space and infinite duration to be negative ideas, he was right, if we grant his hypothesis of their origin. The former he derived from sensation; and all the space we can actually perceive by the senses is finite. The latter he derived from reflection; and every duration which we have personally experienced, is finite also.”

We have always regarded it as an error in the French Eclectic school to maintain, as M. Cousin does, that our psychological idea of infinity is positive. We may admit, that so far as we can carry our idea *towards* infinity, it *is* positive: but this does not satisfy the case. No assignable magnitude fulfils the condition—what the mind aims at is something always greater still.

Among our author's criticisms, is one on the disputed subject of logical definition. The scholastic logicians defined by genus and differentia, so that nothing was definable that could not be regarded as species (e. g., man is a rational animal). Descartes and Locke, on the other hand, rejected this restriction, and maintained that it is only the *simple idea* that cannot be defined.

"Both are right, according to their different meanings of definition. With the former, it signifies the resolution of a complex *general concept* into the simpler concepts which it comprehends: with the latter, it is the resolution of a complex *individual object of sense* into the simpler concepts of which it is composed. No definition, as Locke truly observes, will convey the idea of whiteness to a blind man. But no definition (in the scholastic sense) was ever intended to accomplish this object. Concepts as such are not capable of being presented in sense or imagination. If the purpose of logical definition were to enable us to form an *idea*—i. e., a representative image of an object—pointing it out with the finger would be a far more satisfactory definition than any verbal analysis. But ideas, in this sense, have no connexion with logical definition. Locke's ideas of sensation, simple or complex, are all excluded from the province of definition as being individuals—i. e., as not being concepts at all. An example adduced by Descartes, Locke, and Leibnitz, will illustrate the distinction more clearly. The concept of a chiliagon is a regular polygon of 1000 sides. As addressed to the sense, this definition would not enable any man to distinguish an individual figure of the kind by sight from another which had 999 sides; but, as addressed to the understanding, it is sufficient for the demonstration of the mathematical properties of the figure."

Mr. Mansel employs the same distinction (which is certainly an important one) as a ground of criticizing some of the modes used for logical notation. Logic is concerned with thought, and thought, in the strict sense, is wholly concerned with "concepts." On this account, he objects to the representation of the relation of terms in a syllogism by that of figures in a diagram. To do so he regards as losing sight of the distinctive mark of a concept—that it cannot be presented to sense; and as confusing the mental inclusion of notions in other notions with the inclusion of dimension within dimension. Hegel is of the same opinion, pronouncing it useless to attempt to represent conceptions by spacial figures and algebraic symbols. Our author instances the diagrams of geometry as furnishing no suitable precedent for such a method, "for they do not illustrate the *form* of the thought, but the *matter*;—not the general character of the demonstration as a reasoning process, but its special application as a reasoning about magnitudes in space." With all deference to the authority of a writer of such merit as our author, we demur to his objections. Taking the term concept in the author's sense, it must be allowed that every concept has a limit, that two concepts may wholly exclude each other, may exclude each other partially, may be identical, or that one may contain the other. An example of the first would be *tree* and *moral-being*, of the second *mathematician* and *linguist*, of the third *man* and *rational-animal*, of the fourth *conic-section* and *ellipse*. Now, why

may not these relations be illustrated by geometrical figures? As to algebraic symbols, which were adopted by Aristotle himself, whenever he employed the first three letters of the Greek alphabet as terms, they are eminently suited for the purpose by their brevity; and of the power of an algebraical calculus to express complex propositions, and thus to extend the development of Logic, and to give precision to its notation, we have a recent example in Professor De Morgan's "Formal Logic."

We have dwelt so long on our author's most elementary principles, that we have not much space left for their application. He considers that the three usual divisions, apprehension (conception), judgment (proposition), and reasoning (syllogism), rightly express distinct classes of mental operations, though they all point to one single psychological function as their source—namely, *thought*. He identifies every act of consciousness, in a certain sense, with *judgment*, there being always a conviction of the presence of the object of such act, either externally in space, or internally in the mind—a conviction amounting virtually to the proposition, "This is here." Thus every operation of thought, even the single concept, is a judgment, psychologically considered, though not logically; for in the latter case we must have two objects of thought, and the logical judgment expresses their relation. Reasoning is the most complex of the three operations, as in it two concepts are determined to be, in a certain manner, related to each other, through the medium of their mutual relations to a third.

It may have occurred to our logical readers to ask how the author's theory of concepts can be made to square with *singular* propositions, having the force of universals, as is commonly allowed by logicians, since the predicate is said of the whole of the subject-term? We think his remarks on this part are somewhat far-fetched, and they show that the terms of a proposition are not always concepts, in Mr. Mansel's sense of the word, as above explained. His reply to the question is as follows. If I say—

"Caesar was the conqueror of Pompey, the immediate object of my thought is not Caesar as an individual existing 2000 years ago, but a concept now present in my mind, comprising certain attributes which I believe to have co-existed in a certain man. I may *historically* know that these attributes existed in one individual only; and hence my concept, virtually universal, is actually singular, from the accident of its being predicable of that individual only. But there is no *logical* objection to the theory that the whole history of mankind may be repeated at recurring intervals, and that the name and actions of Caesar may be successively found in various individuals at corresponding periods of every cycle."

We confess that this does appear to us very much indeed like

sacrificing to a theory—like Mahomet going to the mountain, when the mountain would not come to Mahomet. It is indeed saying, with a singular accommodation, as our author quotes :

“Alter erit tum Tiphys, et altera quæ vehat Argo
Delectos heroas; erunt etiam altera bella;
Atque iterum ad Trojam magnus mittetur Achilles.”

The reason given why Aristotle's limitation of the copula-verb to the present tense may be justified, will also appear unsatisfactory to many of our logical readers. No doubt, as our author says, thought involves the consciousness of present mental acts; but when he adds that the office of the copula is simply to deduce the present co-existence of two objects of thought in the mind, we cannot accept of this theory without a qualification. If I put Cæsar and Pompey into relation in my mind, the relation must be in some way determined. I cannot always use the present tense without altering the predicate. If I use it in the former case, I must employ some equipollent proposition.

We regret that our limits will not allow us to go on with our analysis of Mr. Mansel's book, as we must reserve a little space for topics incidentally discussed in these pages, and always with great power of psychological analysis. Indeed, we regard the main value of the work, as a contribution to mental science, to consist in the critical skill with which a variety of questions bearing, sometimes more immediately, at other times more remotely, on logic as a science.

Our author, for example, after remarking on the severity of Cousin's criticism of Locke's definition of knowledge, as being “the perception of the agreement or disagreement of ideas,” decides the point more satisfactorily than either Locke or his critics, while he, more justly than many of the latter, makes allowance for Locke's defective use of terms, owing to the unsettled state of philosophical terminology in his day. As related to *logical* judgments, we agree with Mr. Mansel that Locke's definition, in the sense he meant, is substantially correct, since, in every logical judgment, there is a certain union of “ideas” (our author would always say *concepts*), each being represented by a sign. As these ideas or “concepts” may be regarded as existing in the mind before logical predication, the logical judgment may be said to be formed by the combination of ideas or concepts. M. Cousin's objections tell only against judgments exclusively psychological. Such are all the spontaneous judgments of the mind—that is, all the actual presentations of perception and imagination, producing a realization of the presence of their objects without any logical process. Thus, *ego sum* is a primitive or psychological judgment, one to which Locke's definition will obviously not apply; for self is so presented in consciousness, that to know what we mean by *ego*, is to recognise the all-pervading sense of

our own existence; so that, psychologically, the predicate and the subject are here inseparable, both in the order of nature and of time.

Our author thinks that Kant's definition of judgment is, in one respect, too narrow—in another, too wide. Kant makes thought and judgment the same, and they are both products of the understanding, which he defines the faculty of thinking or judging by means of concepts (*denken is das Erkenntniss durch Begriffe*. Kritik der r. V. p. 70, *Rosenkranz*). And as Kant holds a representative theory of perception, a judgment is the representation of a representation of objects (*das Urtheil is die Vorstellung einer Vorstellung desselben, i. e., eines Gegenstandes*.—Ibid, p. 69). Kant expressly refuses to the intuitive faculties any function that can be called judging. It is evident that the term judgment is used with a different signification if we apply it to our mere perception of objects as present to sense or in consciousness, as compared with its logical use. In some respects, the question is one of the meaning of words; but it must be allowed to our author, that animals to whom we can hardly assign concepts which demand understanding, seem as convinced of the presence of objects as ourselves, and they, so far, judge, in the intuitive (intuitional) sense of our author. The latter thinks Kant's definition, in a logical point of view, too wide, as including all our conceptions or apprehensions; so that any object of intuition may be the subject of possible predication. We cannot further dwell on this point; but we have already remarked that we do not see how every term of a logical judgment can, *without exception*, be regarded as standing for a concept, in our author's sense of the word. At all events, our readers must see, that, laudably as he seeks to draw attention to the extraordinary merits of Kant as a suggestive writer, he by no means slavishly follows him. He justly condemns this great thinker, in a subsequent passage, for asserting that the objects of our intuition (here sensuous objects) *are not* in themselves as they appear to us; for this implies that we have a power of comparison which the hypothesis excludes. The author of the Critical philosophy here "becomes a dogmatist in negation."

There are some very instructive chapters on "Mathematical, Logical, and Psychological Necessity," of which we can only give the briefest summary. The principles of geometry are laws relating to the subjective condition of one portion of our intuitions, those which can only be presented as in space. These principles are empirical, so far as suggested in and through our experience of space; necessary as relating to the conditions under which such experience is possible to our faculties. If there exist anywhere a pair of perfectly straight lines, they cannot enclose a space. Arithmetic is founded on another internal law or condition of our mental constitution—that of time. Mathe-

mathematical judgments are synthetical, in the Kantian sense, and are necessary because thought can only operate in conjunction with matter given by intuition, and intuition cannot be emancipated from its own subjective conditions. Judgments of logical necessity are analytical, and rest on the laws of thought, properly so called. They depend on the principles of identity or contradiction. Judgments of mathematical and logical necessity our author terms "judgments necessary in the first degree." They are dependent on the laws of our mental operations, and their contradictions are neither conceivable nor supposable. Judgments of psychological necessity are necessary "in the second degree." They are dependent on the restrictions of our mental constitution; and their contradictions are "supposable but not conceivable." To this class the author refers the principles of causality and substance, as examples. We wish our limits would allow of our giving a complete view of the whole dissertation respecting these two fundamental principles of the Eclectic school of France. No part of the book exhibits more to advantage the analytical power of the writer's mind, and his original talent for this kind of inquiry; which must be acknowledged by all who can follow him through the maze of conflicting theories, whatever opinion may be entertained of the questions themselves. Judgments necessary in the "third degree" are those of physical necessity, which depend on the laws of the material world, and their contradictions are supposable and conceivable, but not actually true. Finally come purely "contingent judgments," in which either contradictory may be the true or the false alternative. Thus, I am uncertain from what quarter the wind will blow to-morrow, not because this is contingent in itself, but that I am ignorant of the laws which determine meteorological phenomena, though the progress of science may raise these judgments from the category of contingency to that of physical necessity.

Discussions follow on the "matter and form of thought, on positive and negative thought, and on logic as related to other mental sciences," namely, grammar, psychology, and metaphysics. The latter term has totally altered its meaning in modern times, at least down to the period of Kant. In the Scottish schools it has been used as synonymous with empirical psychology, or what Stewart terms the "inductive philosophy of the human mind." Hence we hear of the "Scotch metaphysics." Kant distinguishes it (*metaphysik*) from empirical psychology, and defines it to be the science of *à priori* truth, and regards it as wholly subjective. Its ancient meaning is thus given by our author:

"Metaphysics has, from the earliest days, been distinguished as the science of being as being, in opposition to all inquiries into the pheno-

mena exhibited by this or that class of objects.* How far such a problem is capable of solution is another question; but the mere propounding of it implies an object totally distinct from that of an inquiry into the faculties and laws of the human mind. The object of the older metaphysics has been distinguished in all ages as the one and the real, in opposition to the many and the apparent (Aristot. *Metaph.* iii. 2). Matter, for example, as perceived by the senses, is a combination of distinct and heterogeneous qualities. What is the *thing itself*, the subject of these qualities? Mind presents to consciousness so many distinct states and operations and feelings—what is the nature of that one mind, of which all these are so many modifications? The inquiry may be carried higher still. Can we attain to any single conception of being in general, to which both matter and mind are subordinate, and from which the essence of each may be deduced? (Wolf, *Phil. Ration. Præ.* § 78. Herbart *Allg. Metaph.* § 27.) Ontology, as thus explained, may be treated in two different methods, according as its exponent is a believer in τὸ ὄν or in τὰ ὄντα, in one or in many fundamental principles of things. In the former all objects whatever are regarded as phenomenal modifications of one and the same substance, or as self-determined effects of one and the same cause. The necessary result of this method is to reduce all metaphysical philosophy to a rational theology, the one substance or cause being identified with the Absolute or the Deity. According to the latter method, which professes to treat of different classes of beings independently, metaphysics will contain three co-ordinate branches of inquiry, rational cosmology, rational psychology, and rational theology. The first aims at a knowledge of the real essence, as distinguished from the phenomena of the material world; the second discusses the nature and origin, as distinguished from the faculties and affections of the human soul and of other finite spirits; the third aspires to comprehend God himself, as cognizable *à priori* in his essential nature, apart from the indirect and relative indications furnished by his works, as in natural theology, or by his word, as in revealed religion. These three objects of metaphysical inquiry, God, the world, the mind, correspond to Kant's three ideas of pure reason; and the object of his critique is to show that, in relation to all three, the attainment of a system of speculative philosophy is impossible." (p. 276.)

The notes contain some further highly important dissertations, especially on the vexed question of liberty and necessity; and, in particular, on the arguments alleged for the subjection of the human will to the law of physical necessity. The opinions of Mr. John Mill and of Sir W. Hamilton are here examined with the author's usual ability and candour.

We can only add, that we deem the work, as a whole, to be one of the most important contributions to psychological science that has yet

* This agrees with Aristotle's account of the *First Philosophy*: ἔστιν ἐπιστήμη τῆς ἡ θεωρεῖ τὸ ὄν. *Metaph.* iii. 1.

appeared. The style is, for the most part, eminently clear, the examples for illustration, generally well-chosen; and the book is well adapted accurately to inform all who can and will patiently digest it, on the true bearing of most of the great questions of speculative philosophy, and especially on the connexion between psychology and logic.

ART. VI.—THE PILGRIMAGE OF THOUGHT.*

THE possession of knowledge does not necessarily imply the power of communicating it. It is notorious that many of the most eminent philosophers have been unable to express in simple and familiar language the recondite truths which they may have mastered. Hence the harsh and uncouth technicalities and ponderous sentences which abound in professedly learned works. Others, again, enjoy an extraordinary facility of expression, which we have often thought must depend on some special faculty, for it is not acquired by education, nor can all the *limes labor* in the world produce it. This fortunate gift the author before us, Mr. Dendy, enjoys in a high degree; upon the most abstruse subjects he writes perspicuously, fluently, and gracefully, and in the obscure regions of metaphysics he has the happy knack, like the blind old man in Werter, even in the depth of winter, of discovering flowers. He sets out in the full enjoyment of the cheerful faith that—

“There’s a divinity that shapes our ends,
Rough-hew them how we will;”—

and he communes with our spiritual nature as though he were privileged to sit in the Cave of Plato, familiarly taxing the mysteries of his own soul. In this inquisitive, and by no means unphilosophical mood, he proceeds to analyze the mental alchemy of our being, determining, if possible, to arrive at first principles. “What,” he asks, “is the fountain of that thought—what that mysterious light that has so richly illumined the framework of human nature—that inspired Shakspeare to create new worlds of fancy—Milton to presume an earthly guest in Paradise and Pandemonium—Herschel to bring down to us the stars of heaven—Priestley and Davy and Wollaston and Faraday, to play their splendid tricks with gases and metals—Smeaton, Telford, and Stephenson to subjugate the stubborn laws of mechanics to their will, and Newton to demonstrate the ruling principle of the universe?” (p. 1.)

* ΨΥΧΗ: a Discourse on the Birth and Pilgrimage of Thought. By Walter Cooper Dendy, Honorary Fellow and formerly President of the Medical Society of London, Corresponding Fellow of the Academy of Surgery at Madrid, &c. London: Longman. 1853.

Whence, indeed, we may truly ask, is this mystic and far-searching principle derived? Who can trace, as the noble poet finely expresses it, "home to its cloud this lightning of the mind?" What is the origin and nature of the thought which puzzles us? How is it connected with the material substance of the brain or nervous system? What are the laws that govern its birth and pilgrimage? Is it material or immaterial?—and what am I who thus catechize the ideas and perceptions of which I am conscious? What, as Descartes asked more than two hundred years ago, is this *ego*? Am I anything or am I nothing? am I anybody or nobody? What answer does that profound reasoner, Pascal, give to these curious cross-questionings? "Man," says he, "is to himself the most astonishing object in nature, for he cannot conceive what body is, still less what spirit is, and less than all how a body and a spirit can be united. This is the climax of his difficulties, yet is it his proper being!"

It is upon such abstruse speculations as these that Mr. Dendy obviously loves to dwell; he may be said to have a psychological diathesis ever walking, so to speak, within the shadow of his own mind, and pondering upon its mysteries, which, rightly interpreted, suggest to him views in accordance with that pure and holy faith which is its "own exceeding great reward." It is in a blithe and exhilarating tone that Mr. Dendy descants on these subjects; for he has, it would appear, discovered many a verdant spot in what Carlyle calls the "misty sea of metaphysics;" hence the volume before us does not pretend to be a logical disquisition upon the laws of thought—it is written almost in an allegorical spirit, and is replete with poetical associations, fully confirming one of Coleridge's apothegms, that the highest philosophy is identical with the highest poetry. Under these circumstances, criticism is disarmed; we cannot pause to discuss problems which the author only glances at to illustrate opinions which have been entertained by heathen as well as Christian philosophers; we will not dispute with him the spiritualism of Plato, nor the scepticism of Pyrrho, but would rather take refuge in the wit of Sydney Smith, who happily remarks, "Bishop Berkeley destroyed this world in one octavo volume, and nothing remained after his time but mind, which experienced a similar fate from the hand of Mr. Hume, in 1737, so that, with all the tendency to destroy, there remains nothing now left for destruction."* We prefer, as being more consonant with the character of the little volume before us, briefly calling our readers' attention to the way in which our author has treated his subject, which is obviously one of the most difficult he could have selected.

* Elementary Sketches of Moral Philosophy, delivered at the Royal Institution. London: 1850.

The "Birth and Pilgrimage of Thought" is divided into six chapters, and taking *Psyche* as the root of the Greek word prefixed to each, we have—

Psychogenesis . . .	The birth of thought.
Psychophrenologia . .	The home of thought.
Psychonomia . . .	The law of thought.
Psychopatheia . . .	The bane of thought.
Psychotherapeia . . .	The antidote of thought.
Psychonoesis . . .	The force of thought.

In the first chapter the author briefly refers to the opinions of some of the ancient philosophers concerning the nature of the soul, and repudiates several of the untenable theories of modern sceptics; he then goes back to the history of the creation, and argues that breath or life, soul, and mind, were progressive endowments in the first-born man. This chapter is written in a popular manner, and cannot fail to please the general reader. In the next, the author views his subject under a psychological and physiological aspect, and propounds the following theory:—"We believe," he observes, "that the mind or intellect cannot be an abstraction—cannot be the unity of Brown, or the duality of Wigan and the Alexandrian sophists, or the mere irritability and sensibility of Darwin, which Hunter wisely confined to muscle and nerve, but a *plurality*;" and he adds that he "believes the *plurality* of intellectual organism is proved by the very synchronism of deep and complicated thoughts. If the intellect were an unity, how," he asks, "could Julius Caesar have compassed the subjects of five letters at once, dictating four to his amanuenses and writing the fifth with his own pen? Or how could Phillidor at once fight and conquer in three chess battles with three antagonists? Or how could Sir Walter Scott dictate a history to young Hogg while his own pen was tracing the labyrinths of a romance?" Mr. Dendy then assumes that "there must not only be a firm and enduring texture of the neurine to *accomplish*, as a rigid muscle will labour without fatigue, but a plurality of organism to arrange and work so long on an idea of thought;" and he adds, that "this plurality of intellect is so clear that the spiritual sophist moves at once our wonder and regret. If mind were a unity, and worked without tissue, the whole series of its manifestations must live and die together; but the persistence of one and the loss or abeyance of another of its faculties, is at once a confutation of the fallacy." (p. 67.) This is ingeniously argued; and as we do not agree with our excellent author, we regret that on this occasion we have not space to discuss the question at issue, which would involve us in a long and serious argument. We have, indeed, cited the passage only with the view of showing Mr. Dendy's opinions on this subject; for it is manifest that,

independent of all authorities, he has a disposition to adopt original views, which have, at all events, a strong claim upon our attention. Thus, entertaining the prevailing opinion that the vesicular matter of the cerebral convolutions is associated with the operations of thought, he goes further than any other physiologist, and suggests that "judgment is dependent upon the pure quality of neurine and on the due supply of the pure blood." (p. 81.)

The chapter entitled "Psychopatheia," or the "Light and Shadow of Thought in Emotional Life," refers particularly to the influence of mental emotions upon the physical organism, and contains a number of very interesting anecdotes, from which we select the following:

INFLUENCE OF THE MIND ON THE BODY.

"A lady arrived at her home soon after her husband had suddenly died, in consequence of profuse hæmoptysis from a tuberculated lung. An intense and protracted rigor was the first perceptible effect of this shock, and this was followed by a variety of abnormal sensations, especially in the uterine region. I instantly imparted to others my extreme fear that the impulse of thought would be centred on that organ so intimately associated with her deepest sympathies; and the prophecy was true. The child was born a cretin.

"A mother was standing by her child when its clothes caught fire, but was so perfectly paralyzed, that the child was *burned to death*, although there was a tub of water within the mother's reach.

"Two conscript brothers were fighting side by side, when one was killed; the other, on the instant, became an idiot; and the third brother, on the first interview with the idiot, was instantly struck with fatuity, and the two became permanent inmates in the Bicêtre.

"The last sufferer of death for forgery was thus laid prostrate by his sentence, and never rallied. Omichund, on learning the cheat of Lord Clive, became at once an idiot, and died imbecile. A girl was condemned to death by Lord Kenyon, and although the sentence was only *recorded*, she fell lifeless in the dock. Brichteau relates the case of a young officer, who, on the reception of a slight blow, died instantly convulsed: and when Philip V. received the report of the defeat of his army, he sickened and suddenly died.

"A few years ago, just previous to the death of Sir Astley Cooper, he was called in to reconcile the difference of opinion between another surgeon and myself regarding the propriety of operating on the scirrhus breast of a lady, who came from the country, not to *consult* me, but to request me to operate on her at once. Her expressions were most cheerful, and she was evidently buoyed up by a confident hope of speedy relief from the operation. On Sir Astley's announcing, somewhat abruptly, his disapproval of the operation, the lady almost started from her seat, and soon after fainted. From the moment of the return of consciousness, despondency took possession of her thought, and gradually declining, she died in three weeks from the delivery of the verdict."

One of the most interesting chapters is that entitled "Psychonoeisis," or "the light and shadow of thought in intellectual life." From this we extract the following passage, which will give our readers a fair idea of the style of our author :

THE PERILS OF GENIUS.

"The halcyons of intellect may often point to real aberration, if the perils of precocity be not averted. There are many who are marked as the martyrs of thought in youth—like Wm. Pitt and Lord Dudley, who, indeed, 'were never children.' Genius, like beauty, is often a fatal gift: thought not only begins to grow, but bursts into bloom while the organism is as it were still in the bud. By this forcing of the germ, the sensorial ganglion is exhausted of its energy, and the thought that was once a bright and rational thing becomes a chaos or a blank.

"It is these beings who mentally exclaim with Manfred :

———— 'Look on me; there is an order
Of mortals on the earth, who do become
Old in their youth, and die ere middle age.—
Some perishing of study—
And some insanity.'

"The irritability of genius is the first link in that chain of psychical maladies so often terminating in hypochondriasis, when melancholy marks the martyr of thought as its own. The brain of such a being is acutely sensitive, and he shrinks like a mimosa from the breath of criticism. The thoughts of vulgar intellect are a fret to his own, for they have nothing in common. Seneca, we remember, affirms that intellect cannot be happy in society, as the collision would ruffle the courses of its thought. The eye and the mind's eye, the thought, of the astronomer are ever fixed on the 'majestic roof fretted with golden fire;' his thought soars far beyond the influence of the passions and the collision of earth and its people; that earth that, like a Moloch, by a thousand subtle poisons is hourly guilty of infanticide: Halley, and Herschel, and Newton, were octogenarians.

"But the *poetic* thought is almost a creation; and the birth of this thought may often be a convulsive pang of parturition.

"The creation of a *beau-ideal* of thought renders the intellect deeply hypercritical, contented with nothing short of perfection. There was a girl who rejected her real suitors, and died for love of the Belvidere marble. She would sit gazing steadfastly on the Apollo, and strewing flowers over the mosaic steps, and enfolding the statue with a muslin veil of Inde fringed with gold. At length she died raving. The body may become so acutely hyperæsthetic as almost to 'die of a rose in aromatic pain.' The poet's eye that at one time would, like the Titan, scale Olympus, will at another look, like Semele, on Jupiter and all his glory, and perish.

"Of Viotti it is recorded that 'a simple violet would transport him with the liveliest emotion: the slightest impression seemed communicated to all his senses at once, everything spoke to his heart.'

“Those who have contemplated the course of the ‘genus irritabile’ must feel the deepest sympathy for the penalties of those children of mighty intellect. Ariosto, Dante, Tasso, Alfieri, Voltaire, Rousseau, Cowley, Dryden, Pope, Collins, Johnson, Cowper, Keats, Byron—what a phalanx of beings of bright thought, what a flood of rapture have they rolled into the world of literature, to enlighten and to delight mankind, or to soothe the pillow of anguish. And their own pillow, when the burning brow was laid on that, did the anodyne of slumber always follow? Ask the question of the spirits of those bright meteors that have blazed but to die; the response will be—

‘My slumbers, *if* I slumber, are not sleep,
But a continuance of enduring *thought*,
Which then I can resist not: in my heart
There is a vigil, and these eyes but close
To look within.’

“Such a martyr was Paganini. Sleep almost constantly forsook his pillow. His passion almost consumed his being. He felt that his thought was destroying him, but he resigned himself to his fate with the triumphant murmur—‘*Mais c’est un don du ciel.*’”

We regret much that we can only find room for another extract on a subject which cannot be otherwise than deeply interesting to the medical psychologist, who must be well acquainted with the phenomena which are here so well described:

THE IRRITABILITY OF THOUGHT.

“The irritability of thought is often a consuming fire—a sort of charged jar of intellectual electricity; and the brain finds relief in the safety-valve of exalted composition or acts of absorbing interest. ‘The Bride of Abydos’ was written by Byron, to keep him from ‘going mad, by eating his own heart,’ and Reid believed that, if John Howard had not been a philanthropist, he would have been a madman. The eccentric Elia, perchance, had been as mad as his sister, had he not written *hard*. Galileo, close on his 80th year of age, ‘could not prevent his restless brain from galloping on.’ We may conceive the result, if a curb had been placed on the impetuosity of his thought. Burns was also a martyr to his thought. There were transient gleams of splendour, but his existence was a penalty; it was a sort of champagne vitality. Devoted to the worship of Bacchus or of Venus, he was an enduring slave, either of the Thyrsus or the Cestus. It is perhaps no slight task to decide the struggle between the animal and the intellectual; but in the sensitive, especially, thought *must* gain the victory for intellect, or it will go mad at once—we will not qualify the term. It is true that organism may be so specially *animalized* as to overwhelm a light opposition; but the discipline of thought can effect a powerful control, even over those remote organic excitements that so woefully tainted the intellectuality of Burns, who, like the accomplished but wayward Byron, failed in consecrating his licentious pages with his hypothesis of mock morality and virtue.’ But, it seems, with all this *esteem* for virtue, Love will be ‘Lord of all;’ and

while it inspired the warm outbreathings of the rough and of the polished child of genius, was uncontrolled by pure thought, and thus the heart of each was reduced to a tainted sepulchre. It is a sad thought that without this erotomania, we should never have revelled in the beautiful episode of the exquisite Haidee, or wept for 'Mary in Heaven.' It is true that the stimulus of Eros may not be in the cerebellum; but there are doubtless two or more conditions somewhere in the organism of those who write morality and practise vice. The most wanton cruelty marked the life of the Dean of St. Patrick's, by which the hearts of three innocent and doting girls were wrung and broken, one dying in her blighted passion; and all the while morality was flowing from his lips and pen. Had this been merely moral insanity, Swift would have been a demon; but we pity as well as condemn, when we know the deep organic disease which was discovered in the brain of Swift.

"We are now emerged from the shadows of the darker ages of the world, when these contrasts and conflicts were referred to the influence of *real* spirits striving for the possession of man's heart. Yet even now the fanatic may affirm that conscience, the good spirit, is whispering virtue in one ear—vice, the evil genius, like Satan, holding up the sensual pleasures of the world as a temptation to crime: while the phrenobiologist will argue that the sound convulsion of the brain was the good spirit, the diseased portion the evil genius, and so on.

"Psychology needs not this spurious kind of causation. Her researches discover to her that the excitement, even of a thought, in a soft and sensitive brain, will at once induce various degrees of intellectual disorder, from simple headache to confirmed mania, and this by altering the condition and arrangement of the organism and its circulation."

We are now under the necessity of closing this little volume, which has much interested us, and which we have no hesitation in saying is a very pleasing and graceful contribution to psychological literature.

ART. VII.—THE MANCHESTER ROYAL LUNATIC HOSPITAL.*

THE "Third Annual Report of the Medical Superintendent of the Manchester Royal Lunatic Hospital" at Cheadle has just reached us. It demands special notice; but before proceeding to discharge a duty

* Third Annual Report of the Medical Superintendent of the Manchester Royal Lunatic Hospital, situate near Cheadle, Cheshire, from June 25th, 1852, to June 24th, 1853. Manchester: Sowler. 1853.

Second Annual Report of the Manchester Royal Lunatic Hospital, situate near Cheadle, Cheshire. In the year from June 25th, 1851, to June 24th, 1852. Manchester: Sowler. 1852.

Report of the Manchester Royal Lunatic Hospital, situate in the Township of Stockport Etchells, near Cheadle, Cheshire. This Institution is in connexion with the Manchester Royal Infirmary. June, 1851. Manchester: Sowler.

which we conceive devolves upon us, we shall briefly advert to the history of this establishment.

The Manchester Infirmary was opened in the year 1752, and the hospital for the reception of lunatics, being a separate foundation, was soon afterwards annexed to it. The original edifice, we need scarcely say, has undergone vast improvements; but its situation must still appear inconceivably bad. In the centre of this densely populated city, without any available area affording sufficient space for exercise or garden ground—with a sheet of stagnant water in the midst of a small space of blighted greensward, fenced round with iron railings, immediately before its façade, the stranger may well wonder that the “merchant princes” (as they were designated in the Netherlands during the palmy days of the Hanseatic league) of one of the most flourishing commercial towns in the world, should not have provided a more eligible locality for so important a public edifice. But as accidents are of frequent occurrence in the manufactories at Manchester, it may have been attended with serious inconvenience if the surgical hospital had been built at any distance from the town. The great hospitals of London, the Hôtel Dieu of Paris, are also in crowded districts; and so far, it is true, the position may be defended; but there can be no doubt that, for a lunatic asylum, the situation always must have been exceedingly objectionable. Independent of this, designed in the last century, we can well understand that its construction must have ill accorded with our present improved views of the accommodation required by the insane. The committee therefore determined upon detaching the lunatic hospital from the infirmary, and erecting an asylum in a more eligible situation. Accordingly they purchased a large piece of ground near the village of Cheadle, upon the Mersey, about ten miles from Manchester, and three from Stockport; and while the patients removed from the old building were temporarily distributed in surrounding asylums, the new edifice was steadily and rapidly proceeded with, and completed at the end of the year 1849. Here we may remark, and the history of the Manchester Infirmary in some measure justifies our opinion, that a lunatic asylum can never advantageously be made a *section* of a general medical hospital. The two cannot be combined under the same roof. A ward for the temporary treatment of the insane may be desirable in every hospital; but when the disease has progressed to a particular stage, *such cases can only be properly and efficiently treated in an establishment arranged for that special purpose.* In the December of 1849, the lunatic hospital at Cheadle was opened for the reception of patients; here, however, it may be necessary to explain that this institution does not come under the category either of a county or of a private asylum, but, founded upon charitable principles,

it is in part only a private asylum; that is to say, it is an eleemosynary establishment for the reception of patients "whose circumstances are such as to render it undesirable to drive them to the disagreeable necessity of becoming inmates of the county lunatic hospital." (*Report* i. p. 4.) But there is this anomaly in its constitution—that while its benevolent fund is available for the support of patients who are unable to pay for their maintenance, it is also open for the reception of patients belonging to the highest class. "It is intended" (says the first Report) "for the reception of patients from various classes of society, commencing from the highest class, at weekly payments of 4*l.* 4*s.* and 5*l.* 5*s.*, in proportion to the nature of the accommodation." (*Ibid.*) We have always contended that the two opposite classes of society, the rich and the poor, can never be domiciled with any degree of satisfaction or personal comfort under the same roof; for, strange as it may seem, there would appear to be as broad and as well defined a distinction between different classes of society, as between the different races of mankind, and their amalgamation would even appear to be as difficult. What is true as affects our social sympathies and habits in health, is equally true of them in disease; and the very equivocal success—we may almost, as will presently appear, venture to say the non-success of the Cheadle hospital as a remunerative institution, strongly corroborates the truth of our position.

Under these circumstances, the Manchester Royal Lunatic Hospital was transferred to Cheadle, and the first report of its committee appeared in June, 1851. One of the most prominent objects of this report is to intimate that the institution still continues in connexion with the Manchester Royal Infirmary, which is fairly enough described to the public as being one of its most attractive features. "Another important advantage," says the committee, "enjoyed by the institution, is its immediate and intimate connexion with the Manchester Royal Infirmary. The physicians of this last institution are also physicians of the lunatic hospital, and two of their number are chosen annually as visiting physicians for the year. The patients have thus secured to them the constant services of two of the most eminent and experienced members of the medical profession to advise with and to assist the resident medical superintendent." (*Report* i. p. 5.) We are, in a preceding paragraph, it should be observed, informed that another advantage "is to be found in the experience and efficient management of its resident medical superintendent, Mr. Dickson, ably assisted by his wife as matron, and by other members of his family who are resident in the institution." (*Ibid.*) Such, then, was the original medical organization of the lunatic hospital now removed to Cheadle; it consisted in the supervision of two visiting physicians belonging to the Manchester In-

firmary, who were to be annually elected, and the personal superintendence of Mr. Dickson. Hence, to the first report of the committee we find annexed the "report of the medical officers," duly signed by Thomas Dickson, L.R.C.S. Edin., Resident Medical Superintendent, and countersigned by R. F. Ainsworth, M.D., and F. Renaud, M.D., Visiting Physicians for the year 1850-51. So far, so good; this was clearly enough all *en règle*;—but in the next, the second annual report for the year from June 25th, 1852, to June 24th, 1852, the committee of the institution set out with stating, that "instead of making any regular report of their own for the past year, they have thought it right to publish the report which they have received from the resident medical superintendent." (*Report ii.*) We have, then, a report drawn up by Mr. Dickson, which is *not* countersigned as before by the two visiting physicians. It is not for us to "sit by our fireside, and presume to know what is done i' the capitol," but we are left to surmise that the advantage promised to the institution of being placed under the supervision of two physicians, annually elected, had, at this early period of its history, for some reason or other been withdrawn; not that we mean to imply that the physicians belonging to the Manchester Infirmary are no longer connected with this establishment, for the reverse we know to be the case; nay, the chief business of the Cheadle Lunatic Hospital is, we believe, transacted in the committee-room of the Infirmary at Manchester. We point, however, to the significant fact of the two last annual reports not being countersigned by visiting physicians, with the view of exonerating any physician connected with the Manchester Infirmary from having had any share in the production, or even approving of, the report before us, which we have no hesitation in pronouncing unworthy of any public institution.

We are willing to make every allowance for Mr. Dickson's literary inexperience, and want of ability to express in classical language his ideas, for it is not every medical man who possesses the qualifications of a professed *littérateur*; but when he sat down to write his *third* report he ought to have had a clear conception of the duty which devolved upon him. Neither the public, nor, we presume, the physicians of the Manchester Infirmary, wished him to read them a lecture on insanity. He had an easier task—a simpler duty—to perform, which was, to give in plain unaffected language an "account of his stewardship" in connexion with the state and progress of the institution during the preceding year, accompanied by the usual statistical returns, and a brief description of any cases of special interest which may have come under treatment, interspersing the same with such clinical observations as any particular case might have suggested. The entire use and value of these reports must depend upon their conveying to us a

faithful account of such matters as immediately concern the state and progress of the institution; wherefore the annual report of every lunatic asylum is *de facto* a chapter in its history which ought to be very carefully and circumstantially recorded; nor is it desirable that speculations should be intruded upon us which are wholly irrelevant to the current interest of such documents. We are, it is true, desirous of knowing the details of every important case which may occur in the Manchester Royal Lunatic Asylum; and we fully appreciate every statistical return connected with it, as entering into the elementary stream of a wide and general induction which may hereafter lead to important results; but we care not to see the medical superintendent of the hospital mount the *tripod* to deliver such oracles as are enumerated in the very first page of the report before us:

"I have, on a previous occasion," says Mr. Dickson, with an air of authority, "entered at some length on the question as to what constitutes insanity. I have there stated *my* views on the subject, and will at present merely quote in a sentence or two the opinions I have thus attempted to establish, by an induction of facts gathered from *my own* experience (!) and supported by that of others."

Here Mr. Dickson seems to exclaim with Hamlet—

"The time is out of joint; O cursed spite
That ever I was born to set it right."

But he quickly recovers himself, and over-exultingly thus explains his views:

"Insanity is not a specific disease of itself, such as fever, gout, rheumatism, scrofula, consumption, &c., but is an evidence of disease or malformation existing in some part of the brain or of its membranes; this derangement giving rise to those mental symptoms which we call insanity.' Here I have asserted that insanity is not a *specific* disease; that it does not *operate* in the same manner as the *above-mentioned* diseases; and that it is not to be classed among those which almost necessarily prove fatal, as consumption, &c., but is one of those most capable of successful treatment, and the most *durable* (?) of all diseases."

Upon what "previous occasion" Mr. Dickson delivered himself of this Shibboleth we do not care to inquire; the passage marked by inverted commas as a quotation does not occur in his two former reports; if, however, we do take the pains to unravel this rigmarole of very questionable and indifferent English, we shall find that if it convey any meaning at all, it is, that Mr. Dickson views insanity very much in the same light as other medical practitioners, excepting that he has a fancy to play upon the words "*specific disease*." We know of no medical writer who has contended that insanity is *par excellence* a *specific* disease, nor is it at all apparent what Mr. Dickson himself understands by the word *specific*; hence it would seem that he has set up a dogma of his own for the purpose of triumphantly knocking it down, and founding upon

it the following very equivocal reasoning. "If, then," he continues, "insanity be not a specific disease, and if it be capable of such treatment as is likely to effect a cure, we can understand from observation of those who labour under it what is the nature of the disease, and what are the causes which have produced it." There is nothing very satisfactory in this style of argument. It does not follow that because a disease yields to medical treatment, that therefore its true pathology is unveiled to us. Neither is it by any means clear that the removal of the cause which has produced any particular form of mental disease would necessarily effect its cure.

"The producing cause," says Mr. Dickson, "being for the most part known (*query*) to all who have intercourse with the person affected, what does common sense say as to the remedy likely to prove most effective in the removal of the disease? The most obvious answer which suggests itself is this, 'Remove the cause and the effect will cease.' All other remedies must give way to this one; whatever prejudice under the garb of superior knowledge may suggest as to the cause or the treatment of the malady, must be rejected by every one who takes this common sense view of the matter, especially if by a sufficient induction of cases we can establish the fact that this is the best and most successful method of cure."

Every physician, as Mr. Dickson must be aware, recognises the old axiom, "*Sublatâ causâ tollitur effectus*;" and there can be no doubt that in the incipient stages of insanity, the removal of the exciting cause, whether moral or physical, may in many instances effect a cure; but unfortunately in a very large proportion of cases this wise precept will not hold good; the mind having received a sudden shock may, we all know, be shaken upon its throne and never again resume its empire. But what has this to do with the hospital at Cheadle, its state and progress during the past year, or with the official details which we might reasonably have expected to find in this report? Assuredly nothing! The two former reports of this institution by Mr. Dickson were business-like and to the point, but the subject-matter of the first half-sheet of the present, the third annual report, has no more to do with the Manchester Royal Lunatic Hospital than with the State Lunatic Asylum of Ohio, or with the proceedings which may, for aught we know, at this moment be going on in the camp of the great Cham of Tartary.

Unrelieved by a single ray of original thought, and expressed, to say the least, in very inelegant language, we are glad to get rid of these discursive introductory observations, and enter upon the proper business of the report, which appears to begin at the bottom of page 8, with a puffatory description of the hospital and its surrounding gardens.

We must here protest *in limine* against the annual reports of our

lunatic asylums being converted into surreptitious advertisements; under the pretext of an official report, we occasionally find an ostentatious display palmed upon us of the advantages to be derived from this or that asylum, addressed indirectly to the public rather than to the governors of the institution or to the medical profession. This is obviously very much the character of the report before us; in proof of which we may subjoin the following detached passages, reminding the reader, upon the authority of Puff himself, that "puffs are of various sorts; the principal are the 'puff direct,' the 'puff preliminary,' the 'puff collateral,' the 'puff collusive,' and the 'puff oblique' or 'puff by implication.'"

"The hospital" (we quote the report before us) "is large and commodious, and fitted up with every convenience that can render it healthful and agreeable." (p. 8.) . . . "Opportunities for physical exercise are amply supplied by the farm and the gardens, comprising upwards of thirty acres." (*Ibid.*) . . . "The hospital is amply supplied with all kinds of vegetables, fruits, &c., in their season, and several extensive flower-gardens." (p. 9.) . . . "A very interesting part of the patients' work during last winter, was the transplanting of trees from those situations where, having been planted too closely at first, they had overgrown and become too thick for the purposes they had been designed to serve; these were transplanted from the avenues and gardens to form ornamental clumps in the field in front of the hospital." (*Ibid.*) . . . "Two walks (in the kitchen garden) have been formed the entire length of the outside garden walls at the back of the hospital, intersected by cross walks from each of the back entrances; these walks are to be surrounded with a low fence and those decorations which will render them more pleasing and agreeable to the eye." (*Ibid.*) . . . "These operations have been entirely carried forward by the patients and their attendants, and it is delightfully interesting to see with what spirit and vigour they have been prosecuted." (*Ibid.*)

Here we have a very fair specimen of the meretricious style adopted by auctioneers in advertising estates for sale. No doubt the mind of Mr. Dickson is deeply imbued with this kind of classical literature; indeed, when he proceeds to describe more in detail the appointments of the hospital and management of the patients, the mantle of the late George Robins appears to be visibly descending upon his shoulders. He cannot mention the carpenter's shop connected with the hospital without reminding us that it "is fitted up with a turning-lathe (made by a patient), benches, and a variety of *such tools and other conveniences as may enable them to perform any such kind of work as is required.*" (p. 11.) The language, by the way, of the late George Robins, when upon this nether earth, was certainly more graceful than this. Nor can Mr. Dickson allude to the ordinary daily work executed by the patients without indulging in the same "Ercles vein;"—thus, "The summer-houses erected last year, and so much admired by the Commissioners in

Lunacy, all the outside gates and garden doors (twenty-one in number), and the iron fence in front of the hospital, have all been re-painted; in the interior, nine rooms have each received four coats of oil-paint, fourteen bedrooms, four sitting-rooms, and three galleries have been coloured, and the entire corridors of the servants' departments have been twice whitewashed." (p. 11.) Wonderful, most wonderful! Highly gratifying is it to hear that "throughout the whole of these operations the best and most cordial feelings have prevailed between the carpenter and the patients, and the most satisfactory results have followed to the patients' health." (*Ibid.*) Were details of this description set forth simply to show the governors of the hospital the system of discipline and management adopted in the establishment, it would be legitimate enough; but more than this is here attempted—the most common appointments in asylums, the most ordinary occupations and recreations of the patients, are surcharged in description for the obvious purpose of producing what in theatrical language is called "a striking effect." Take, for example, the following exaggerated account of a game of cricket:

"In connexion with these useful exercises," says Mr. Dickson, "may be classed such outdoor amusements as bowling and cricketing: in the latter recreation many of the patients have been greatly interested; an exercise so exciting in its nature, and so well fitted to call into play every muscle of the body, to excite every nerve, and also requiring such an amount of mental as well as physical activity, is well adapted to prove beneficial to the insane; occupied either in bowling or batting, the energies of their minds are called forth which had become dormant; and on these occasions, or when fielding out on all sides of the wickets, the emulation to catch the ball and displace the person occupying the much-envied position at the wickets was exciting enough to interest many of them intensely: from their own testimony, and from the evident delight which a looker-on could not fail to observe them to take in this exercise, it was evident that some of their happiest hours were passed in this exciting recreation." (pp. 11, 12.)

Bosh! It would evidently not have sufficed if Mr. Dickson had stated in his report that the patients had amused themselves occasionally by playing cricket, as they do at other asylums—there must be a coloured daguerreotyped picture, to produce effect: hence this ludicrous piece of clap-trap! So, too, he is not content with reporting that the rooms of the patients are provided with a certain number of books or magazines for their amusement; he must go further:

"Of periodicals," says he, "we receive 'Blackwood's Magazine,' 'Chambers's Journal,' 'Dickens's Household Words,' 'Bleak House,' 'Illustrated London News,' 'Punch,' &c. Of newspapers, we get the 'London Times,' 'The Manchester Examiner and Courier,' 'Stockport Advertiser,' 'Ladies' Journal,' &c. Some of the patients are keen politicians, and pay great attention to every political movement that is taking place in the world: the amount of intelligence they manifest

and the evident delight they derive from information as to passing events, is strikingly manifest, and proves that though their minds may be erratic and adrift on some points, on others they reason and judge with as much correctness as if they were perfectly sane; with such persons the reading-room is a favourite retreat." (p. 12.)

The fact here referred to must be familiar enough to men who have ever had the charge of a lunatic asylum, but why so much overcolouring of detail? It may please Mr. Dickson to dwell upon the healthful and agreeable locality of the hospital, the completeness of its internal arrangements, the comforts provided for the patients; but what, after all, is the true state of the case? The Commissioners in Lunacy, before approving of the erection of an asylum, or granting any house a licence, require that it shall be situated in an open, cheerful, salubrious locality; hence the asylums of England are for the most part to be found in the most beautiful spots that can be selected; they also make it imperative that the house shall stand on a certain amount of acreage, for gardening or agricultural purposes, and that airing courts and pleasure-grounds shall be accessible to the patients; they furthermore insist upon the apartments, whether public or private, being comfortably and even handsomely furnished, and direct that the patients shall be supplied with the means of occupying and amusing themselves with books, games, &c. But no well-conducted asylum would ever dream of advertising these as special attributes—they are the common conditions which the Commissioners in Lunacy require shall be provided in every asylum.

One of the evils arising from Mr. Dickson's hyperbolical style of diction is, that a false colouring is reflected upon the actual state of the institution; thus, he sets out with announcing that "never before has this institution better answered the purposes for which it has been erected, or more fully met the anticipations of its projectors." Why, the hospital has not been opened more than four years, although the foundation of the institution may carry us back to the last century. And what has been the success of which Mr. Dickson boasts? We may form some idea by the following tabular view, constructed from the statistical tables in the three reports before us, exhibiting the state and progress of the hospital since it opened.

	Admitted.	Discharged Cured.	Discharged Relieved.	Died.	Remaining in Hospital.
From the opening, December, 1849, } to June, 1851 . . }	65	17	7	6	33
From June, 1851, } to June, 1852 . . }	33	17	4	8	37
From June, 1852, } to June, 1853 . . }	35	16	5	4	47

We confess that the table before us does not suggest any particular cause for congratulation : look at the admission column ; between 1851 and 1852, there were 33 admissions ; and between 1852 and 1853, only 35 admissions. Then, when we refer to the Commissioners in Lunacy's annual reports, we find that on the 1st January, 1851, there were 23 patients in the hospital, and on the 1st January, 1852, only 33. Yet is this hospital constructed for the reception of 100 inmates, situated in the centre of one of the most populous manufacturing districts in England, having all the interest at its command which the Manchester Royal Infirmary and its eminent physicians can bring to bear upon it. We believe that the institution is in every respect well conducted ; and although we see every reason to condemn unsparingly the report before us, we believe that Mr. Dickson, in his capacity as medical superintendent, discharges his duties ably, and is entitled to the highest confidence ; but, as we above hinted, the success of the hospital is obviously so very equivocal as not to warrant its third annual report opening with a flourish of trumpets. There may be many reasons for the admissions at Cheadle Asylum being fewer than might have been expected ; nor does the circumstance militate in any way against the management of the establishment. Since the opening of the Rainhill Asylum, ample provision has been made for the lunatic poor of Lancashire, which has now three very large and admirably organized asylums at its command. Near Manchester and Liverpool, it has also to contend with the competition of five private asylums. And here we may venture to relate an anecdote : when we were recently in Manchester, we were speaking to a physician concerning the hospital at Cheadle, when he mentioned that he had met with several patients he was desirous of sending there, but he could not prevail on the relations or friends to do so, because they entertained a notion that, being in connexion with the Manchester Infirmary, the institution was a public charity. Here, then, we meet with an additional illustration of the predominance of that feeling—call it an incurable prejudice if you will—which we have so often pointed out as throwing an insuperable barrier between private and public asylums.

To return to the report before us. We find Mr. Dickson vaunting in no measured terms of the success which has attended his treatment of recent cases of insanity ; but figures, like edged tools, are dangerous weapons, and when we compare the statistics he has laid before us in the second and third reports together, we again find no very great cause for self-congratulation. The average number of patients admitted during the past year, says the report of 1852, was 36. Of the patients discharged, 17 were cured ; being in the ratio of 51·22 per cent. to the number of admissions, or of 47·22 per cent. to the average number resident. Then turning to the third report, for

1853, we read—"The average number daily resident throughout the year was 39·53. Of the patients discharged, 16 were cured, being in the ratio of 42·8 per cent. to the number admitted, or of 41 per cent. on the average number resident." The curative results, therefore, exhibited in the third annual report, are less satisfactory than those in the second, there being a falling off in the percentage of cures upon the number of patients admitted of 9·14 per cent., and on the number of resident patients, 6 per cent. We do not refer to this less favourable return of cures with any ungenerous views: the falling off doubtless occurred from circumstances over which Mr. Dickson had no control; but, with his statistical tables before him, he might have spoken in that tone of moderation which becomes every medical man who knows how precarious, from year to year, are the results, in all diseases, of the best medical treatment.

The most objectionable, or rather the most reprehensible, portion of this report is its conclusion, where we find that Mr. Dickson has adopted a course which we believe to be unprecedented in the drawing up of these annual reports. After having lauded to the skies the Royal Hospital, under his immediate superintendence, and given the most flattering account of every department connected with it, he concludes his report by annexing to it a series of eulogistic memoranda which his personal friends who have visited the hospital have, strange to say, been permitted to inscribe in the "Visitors' Book." He first lays before us a copy of an entry by the Commissioners in Lunacy, dated the 22nd September, 1852, in which they state: "We think that the general condition of the hospital and patients is creditable to Dr. and Mrs. Dickson, and we only have to regret that so few patients have the benefit of the good accommodation provided." This must have been very gratifying to the superintendent, but it is by no means clear to us that the commissioners intended their entry for publication: be this as it may, the Earl of Shaftesbury, in November last, visited Manchester on one of those philanthropic occasions which he so frequently and so generously attends, identifying his noble name—illustrious in the annals of literature—with every good and charitable undertaking which promises to ameliorate the social and religious condition of the working classes—when, of course, the opportunity was not lost sight of by Mr. Dickson, of inducing his Lordship to visit the Royal Hospital at Cheadle. We have, therefore, annexed to the entry of the commissioners, a memorandum from the noble Earl—stating, as Chairman of the Board of Lunacy—that he fully concurs in the last report of his colleagues.

Here we may observe that we have very great doubts as to the propriety of publishing the entries which the Commissioners in Lunacy

make at their official visits without their special sanction, which would even then have the effect of creating an invidious distinction between asylums which may be all equally well conducted. Such entries are made by the Commissioners in Lunacy as administrators of the law, and in accordance with the directions of the Act of Parliament. They ought not, we apprehend, therefore to be paraded forth as advertisements, to serve the private interest either of individuals or institutions; but had Mr. Dickson stopped here, whatever we might have thought of his taste or discretion, we should not have accused him of any very marked transgression. He has, however, gone much further than this; he has induced unofficial persons, who happened to be passing through the neighbourhood—besides his personal friends—to visit the hospital at Cheadle, and then record their favourable impressions; and in this manner has he collected a series of eulogistic demonstrations, which are published at the end of the report before us as being “Extracts from the Visitors’ Book.” We did not, for our own parts, require Mr. Dickson to call “witnesses as to character;” and we have no hesitation in saying, that in doing this, he has had recourse to a proceeding which is wrong in principle and vicious in tendency. But before referring more particularly to these complimentary effusions, we should like to inquire what right any unofficial persons have to inscribe any observations whatever in the “Visitors’ Book?”

The Act of Parliament (8 and 9 Vict., cap. 100, sect. 65) enacts that this “Visitors’ Book” shall be kept in every licensed house and in every hospital in which lunatics are received, for the Commissioners in Lunacy and Visitors respectively to enter therein at the time of their visitations the results of their inspections and inquiries, with such observations as they may think proper to make. It is therefore the book appointed by law to be kept as the official record of every licensed house or lunatic hospital; as such it has always been set apart and esteemed by us, and we confess we never before heard of its being handed about from stranger to stranger by any medical superintendent, for the purpose of getting their “favourable impressions” inscribed in it. The testimonial system we believe to be thoroughly rotten at the core; and we confess we are sorry to see this attempt made to introduce it into our annual lunacy reports. Here we have first, as an extract from the “Visitors’ Book,” a complimentary effusion from Mr. Powell, inspector of asylums, Mauritius. He states—“I have spent some days with Mr. Dickson, and feel unwilling to leave without some record of the very favourable impressions left on my mind from what I have observed of the manner in which this institution is conducted by Mr. and Mrs. Dickson.” No doubt Mr. and Mrs. Dickson are very good, kind, hospitable people, and their courtesy well deserved some requital;

but what business the inspector of asylums at the Mauritins had to insert his grateful impressions in the "Visitors' Book" of the asylum we are at a loss to discover. The fashion, we believe, still prevails at the first-class hotels at watering-places for a "Visitors' Book" to be presented to the passing traveller when he pays his bill, that he may enter in it before he takes his departure some little laudatory acknowledgment of the excellence of the fare, the civility of the attendants, and the comfort of the accommodation; the same plan seems to be adopted by Mr. Dickson at the Royal Hospital, and it is evident that the inspector of asylums, Mauritius, could not, with a good grace, have done less on leaving the Institution than give Mr. Dickson the eulogium before us. Next comes a gratifying memorandum from Dr. Williams, Physician to the North Wales Lunatic Asylum; he, too, has of course great pleasure in recording his "favourable impressions" of his visit to the Royal Asylum at Cheadle—"very creditable, indeed, to Mr. and Mrs. Dickson;" "air of comfort and cleanliness" about the asylum, "which cannot be surpassed;" "patients happy;" what more can be desired? Next follows another highly satisfactory extract from the "Visitors' Book," by Dr. Kingdon, the Superintendent of the Lunatic Hospital at Exeter; he likewise has no hesitation in expressing his unqualified admiration of all that he saw and heard at the Royal Hospital. Other testimonials in the same panegyrical strain follow, among which we observe one from Dr. Burton of Maryborough, another from Professor Anderson of Glasgow, another from Dr. Hubertz of Copenhagen; but let Mr. Dickson for a moment pause, and ask himself what is the real, the intrinsic value of these eulogia? The simple fact of their being printed at the end of this report shows clearly that, whether solicited or volunteered, they were written with that view, but instead of creating a favourable impression on our mind they have the very contrary effect, inasmuch as they suggest to us that Mr. Dickson must have felt conscious that he needed such support to give *éclat* to his annual report, which presents to us the type of every feature which should be avoided in drawing up such a document. We have said that the tendency of the plan which Mr. Dickson has adopted in annexing these flattering "extracts" from the "Visitors' Book" to his report is vicious; we repeat it, for if the superintendents of other asylums did the same, where would it end? An unworthy competition in advertising themselves would be provoked, which would be derogatory to every institution which followed Mr. Dickson's example. How easy to seize an "individual of the highest eminence in this department of medical science" by the button and invite him to dine with us; how pleasant to discuss the chances of the war between Russia and Turkey over a bottle of old port wine before a glowing and

cheerful fire; how agreeably passes the evening until the hour comes when our "eminent" friend must perforce take his departure, and will he do so without leaving behind him some slight record of the favourable impression which we hope to have made upon him? "Not for the world!" "Shall we ring the bell?" "John! bring the 'Visitors' Book!" "Infinitely obliged—very kind of you!" "It shall be published in my next annual report!"

ART. VIII.—PROFESSOR VALENTIN'S PHYSIOLOGY.*

THE "LEHRBUCH DER PHYSIOLOGIE," by Dr. Valentin, Professor of Physiology in the University of Berne, is an elaborate systematic treatise on physiology, which enjoys a very high reputation in the medical schools of Germany; we are therefore under great obligation to Dr. Brinton for having, in the form of an abridgment, rendered the substance of so valuable a work accessible to the English student. We have, it is true, many excellent elementary works on physiology—Todd and Bowman, Carpenter, Kirke, Mayo, Milligan's translation of Magendie, &c.,—but the present text-book has many attractive features which cannot fail to interest both the senior and junior members of the profession. We have, in carefully perusing the volume, been struck with the extreme perspicuity of the style, the vast amount of information condensed into a narrow compass, and the clear explanation which is given in describing successively the different organic functions of the animal economy. We have also been interested in reading the opinions of so high an authority as Professor Valentin on many doubtful and obscure points in physiology. "*Quot homines tot sententie.*" Since the days of Haller—but we may go back to a remoter age—theories of organization, life, digestion, absorption, animal heat, respiration, nutrition, muscular action, and innervation, have flitted across the horizon of medical science, one fascinating theory eclipsing another as rapidly as new observations have revealed to us new discoveries. Looking back to the period when Cabanis published his sketches of the "Revolutions of Medical Science," what changes have not occurred in our physiological and pathological views? but we must not pause to moralize, "*tempora mutantur et nos mutantur in illis,*" progression is the order of the day, and unceasing change in all things the great law of nature.

The "Text-Book of Physiology" before us is a goodly-sized volume,

* A Text-Book of Physiology. By Dr. G. Valentin, Professor of Physiology in the University of Berne. Translated and Edited from the third German edition, by William Brinton, M.D., Licentiate of the Royal College of Physicians. London: Renshaw. 1853.

extending to 684 pages; it is divided into nineteen chapters, the contents of which are arranged in numerical sections, any one of which, with the assistance of a good index at the end of the book, may be referred to with great facility. The chapters beginning with one on "Organization and Life," treat successively, as we find in other elementary works on physiology, of the functions of all the different organs of the body; but as connected with our own speciality we prefer restricting our attention to the section which refers more particularly to the functions of the nervous system. We were, indeed, as we had premised, desirous of ascertaining Professor Valentin's views upon many interesting points, such as the correlation supposed to exist between the size of the cerebrum or number of its convolutions, and the manifestation of the intellect, the functions of the cerebellum, &c. Upon the former subject Professor Valentin remarks—

"There is no doubt that an abnormal smallness of the brain is connected with idiocy. And it is very probable that persons distinguished for their intellectual powers possess brains which are either as a whole or in particular parts. But it is far more difficult to prove this excess than the converse diminution *for the abnormal circumstances which precede death may themselves produce a deceptive increase of weight*; and we have a right to suppose that the mental endowments are materially influenced, not merely by the quantity of the organ, but also by its quality and relative capacity." (*Sect.* 2059, p. 602.)

There is, we believe, much truth in this observation. Among pseudomorbid appearances which occur after death, it is very possible there may be sometimes an increase of weight, owing to the exudation of a large quantity of serum in the ventricles. In the act of dying effusion certainly may go on very rapidly.

"The high forehead" continues the Professor, "which is frequently regarded as an external indication of mental power, certainly does generally depend on a greater development of the anterior lobes, and of those parts of the skull which cover them. Still, this does not justify the conclusion that it is those segments of the cerebral mass which exclusively regulate the higher mental capacities or many of the faculties that express them—such as, for instance, eloquence. Comparative and pathological anatomy unite to testify that the middle and posterior lobes of the brain, and many of its internal swellings (such as the pes hippocampi and pes accessorius which lie in the posterior corner of the lateral ventricle of each hemisphere) are at least as important as its anterior segments." (*Ibid.*)

It may be remembered that Desmoulins suggested the theory of there being a correlation between the higher manifestations of the intellect and the number and depth, or rather the extent of surface of the cerebral convolutions.

"It has often been maintained," observes the Professor, "that in men distinguished for intellect the convolutions of the two cerebral hemispheres are more numerous and less symmetrical. But the fact itself is by no means established. And besides this, experience teaches that the advantages which are perhaps associated with the convoluted arrangement, may be quite annihilated by internal disease. *The brain of a cretin often exhibits large and complicated convolutions*, while its cavities are distended by copious fluid exsudations." (*Sect.* 2060, p. 602.)

The late Dugald Stewart in commenting upon and censuring the hypothetical doctrines of Hartley, Darwin, and Priestley, seems to hazard a prophecy that no physiological researches will ever throw any light on the connexion which exists between the mind and the body. "I object," he says, "to such investigations, as being merely a waste of labour and ingenuity on questions to which the human faculties are altogether incompetent." ("Preliminary Dissertation to the Philosophical Essays.") But had Dugald Stewart lived to see the recent progress of physiology and pathology, and the method of observation now pursued, he would probably have modified in some measure so disparaging a prediction. The theory of vibrations was a sheer hypothesis; unsupported by observation, it started fully formed into existence, like Pallas ready armed out of the head of Minerva; but the connexion which is now sought to be established between physiology and psychology proceeds, we venture to affirm, upon more philosophical principles—upon inductive observation, rather than pure speculation. One chief cause of the little assistance physiology renders to psychology is very truly attributed by Professor Valentin to our "deficient knowledge of the physiology of the nervous centre," and another, he suggests, may be ascribed to the way in which we conceive the mental functions to take place.

"We describe," he observes, "certain external phenomena as results of knowledge, judgment, or reason, without recollecting that the basis here assumed to be an unit is the result of a series of links to which we have no access. We have seen that the perception of the simplest sensuous impression, and the excitation of the slightest muscular movement, depend upon a transfer and conduction of certain material changes which mutually conditionate each other, and play into one another like the cogwheels of a machine. Hence we are justified in conjecturing, that what is apparently the most direct mental action also proceeds from a series of mutual tensions and transfers, and that the failure of any link of the chain leads to an error or false conclusion. The general significance of such processes may be easily imagined from the analysis offered by these simple phenomena. But the satisfactory investigation of their details, the only true self-knowledge, will probably for ever baffle the spirit of human inquiry." (*Sect.* 2068, p. 604.)

Let us hope that this dark foreboding of the learned Professor may not be verified; we recognise the difficulties which embarrass our investigations only in the hope of surmounting them; we still look for progression, and at all events conceive that no one has a right either in mental or physical science, to say "thus far shalt thou go and no farther;" a sceptical philosopher may, like Canute the Great, plant his chair at the margin of the sea to reprove his disciples, when the waves appear shining tranquilly at their lowest ebb, but ere long he will find the tide rise, and the accumulating waters swelling round him will compel him to retire from his position. The progression of human knowledge is thus irresistible—he, however, who would assist in extending its boundaries, in accelerating its current, must not be restrained by any circumscribed ideas of *finality*; he must embark with a cheerful faith upon all his investigations in the full assurance that truth will unveil herself to all who diligently seek her, and that she has imposed no restriction upon our footsteps.

To return: the functions of the cerebellum have been the subject of much discussion; some physiologists from the experiments made on living animals have inferred that it is the organ which co-ordinates the muscular movements of the body. But however plausible this view may be, the unsteady movements of animals—birds, for example—whose cerebellum has been removed, and the ineffective flutterings which accompany them, may, it is surmised by Professor Valentin, be rather consequent upon certain local conditions of progression or flight—such, for instance, as the proper fixation and adjustment of the spinal column. The idea that the cerebellum has any special influence over the sexual organs, the Professor emphatically repudiates.

"Experience," he says, "does not confirm this theory. It is true that the seminal ducts, the oviducts, and the uterus of the domestic mammalia may be thrown into contraction from the cerebellum. But the same effect can be produced through other parts of the nervous centres (lesion of the spinal cord or medulla oblongata). The cerebellum of geldings is as large as that of stallions, and Flourens found that a cock from whom this part of the nervous centre had been removed still made distinct attempts at copulation." (*Sect.* 2047, p. 599.)

The Professor further remarks that—

"Degeneration of the human cerebellum does not necessarily give rise to imbecility or any other affection of the mental powers. Destruction of one of its hemispheres has sometimes been accompanied by an uncertainty of gait, a tendency to rotatory movements or hemiplegia, usually of the opposite side, but limited disease of the cerebellum may exist without any considerable disturbance of the action of the voluntary muscles." (*Sect.* 2048, p. 600.)

We had marked several other passages for extract, but with much

reluctance must, at all events for the present, forbear transcribing them; almost every section in this abridgment of Valentin's great work on physiology, might indeed suggest a running commentary. The translation has been very carefully and faithfully, and we may add elegantly, rendered; and unlike translations in general from the German, its style is fluent and agreeable. We should add that the diagrams and illustrations, above three hundred in number, are beautifully executed and admirably represent the subjects delineated. It is evident, indeed, that Dr. Brinton has bestowed very great pains on the volume before us; his critical knowledge of the German language well qualified him to execute a task which we can only conceive his having undertaken as a "work of love;" and we have no hesitation in expressing our conviction that this "Text-Book of Physiology" deserves to be as popular in our medical schools as the original is in Germany. We therefore cordially recommend it to the students at our English universities.

ART. IX.—ON THE RELIGIOUS INSTRUCTION OF THE INSANE.

It is only in Lunatic Hospitals that the course of treatment indicated by an intelligent consideration of the different phases of insanity, can be applied. Nowhere else can the varied forms of occupation, recreation, and amusement be so successfully carried out; nowhere else can the same amount of indulgence be safely granted. It is here alone that beneficial results can be reasonably expected. Elsewhere the consequences will vary with the character of the cases. Generally one of two results ensues—the mind, left to itself, dwells with increasing intensity upon the diseased train of thought, until excitement, growing by its own indulgence, overcomes the vestiges of reason, and the sufferer becomes an ungovernable maniac; or weakened by the shock which disease has inflicted upon the system, gradually loses its power, and sinks into a state of torpidity or childishness. This tendency to mania or dementia, the aggravated extremes of disease, we find illustrated whenever the insane poor of any community are not provided for in a suitable hospital, but are left to the tender mercies of jails and alms-houses, of cages and dungeons, of bonds and fetters. The expositions which have been lately made, of the suffering condition of the pauper insane, in the jails and alms-houses of Massachusetts, and the County houses of New York, when considered in connexion with the energetic philanthropy, and the diligent benevolence of those States, may lead us to fear that a similar investigation would disclose an equally deplorable state of things in Connecticut. Developments occasionally reach us, which would justify the strongest apprehensions of such results.

The religious services of the Sabbath, and of daily evening prayer,

have been regularly continued by our estimable chaplain, Rev. Mr. Gallaudet. More extended experience and observation have confirmed the sentiment which I have elsewhere advanced, in relation to the beneficial influence of religious worship; that, leaving out of the estimate all other results, a high rank must be assigned to it as a remedial measure. But its influence may not be thus limited. Amid the vestiges of reason, the affections and the sensibilities exist as warmly and as acute as ever, and in many cases the same high and ennobling results may be attained, as from the operation of similar causes upon individuals under ordinary circumstances. Dr. Poole, the intelligent superintendent of the Montrose Asylum, says, "After the obliteration of reason, many of the highest feelings of our nature remain, to which a successful appeal may be made: and those by which we are connected with a higher sphere of existence admit as readily of being awakened on the proper object being presented to them, as the ordinary passions under which the lunatic acts. Their influence is in the highest degree consoling, and congenial to the return of mental strength and serenity; the effects in each individual are probably as different as in the members of an ordinary congregation." The judicious application of these means, (upon which their efficiency peculiarly depends), requires that they be made, as in the Retreat, in consistency with the general course of discipline and treatment which the medical officer has been led to adopt. Having for a long time been deeply impressed with a sense of the duty and importance of providing for the religious instruction of the insane, it is gratifying to witness the extending prevalence of similar sentiments. The claims of the lunatic, that he shall no longer be excluded from the privilege of worshipping God, are being widely recognised. In all the leading institutions of this country, and in the Retreat among the first, arrangements have been made for the due and customary observance of the Sabbath, either by the appointment of a chaplain, or by the aid of the neighbouring clergymen. In most, suitable chapel accommodations are provided, to add force and dignity to the service. The same is true of many of the hospitals in Great Britain and on the Continent.

Thus, one by one, are the errors and delusions relative to insanity passing away; the enlightened reason and the sympathy of their fellow-men are opening the prison-doors of the lunatic, striking off his fetters, and restoring the rights and dignity of humanity. They are giving back to him the Sabbath day, that all the calm and soothing influences of that holy time may rest upon his heart.—From Dr. Butler's interesting *Report of the Hartford Lunatic Asylum, U. S. America.*

LETTSOMIAN LECTURES.

No. I.

THE PSYCHOLOGICAL VOCATION OF THE PHYSICIAN.

Delivered before the Medical Society of London, April 7, 1852.

BY

FORBES WINSLOW, M.D. D.C.L.

THE PSYCHOLOGICAL VOCATION OF THE PHYSICIAN.

HAVING had the honour of being appointed Lettsonian Professor of Medicine, of the *Medical Society of London*, I accepted the office with, I trust, a humble appreciation of my capacity to discharge satisfactorily its duties in a manner commensurate with their grave importance. The distinction conferred upon me is one not to be lightly esteemed. To be selected from a body of physicians of great and admitted eminence, of profound learning, of scientific attainments of a high order, of undoubted eloquence, as Lettsonian lecturer on medicine, is an event which I shall ever cherish with lively emotions, as one of the most pleasing and personally gratifying occurrences in my chequered life.

The post thus assigned to me by your kindness, entails upon me the pleasing duty of delivering, before this Society, *three* lectures connected with that division of medical science with which the physician is supposed to be especially conversant. In selecting three topics for illustration, I felt anxious to bring under review subjects worthy of your consideration; and involving in their elucidation, points of theoretical as well as of practical interest. I flattered myself that I should be realizing your anticipations, and be acting in unison with the wishes of the Council, if I were to confine myself to the exposition of three points connected with those investigations with which my own mind is supposed to be more particularly occupied. Under this impression, I have, with, I hope, a right sense of the difficulty of my self-imposed task, selected, as the subject of my first and introductory lecture, a question of extreme interest to all engaged in the practice of medicine.

Having, from an early period of my professional studies, formed a high estimate of the importance of the science of mental philosophy, and devoted much attention to the investigation of questions relating to the influence of the spiritual upon the material portions of the organization, I may, perhaps, be excused, if I should, in the course of my remarks upon the necessity of a more

general and accurate knowledge of the science of mind, convey a somewhat extravagant conception of the value of that section of inquiry which presents so many charms to my own imagination. With the object of demonstrating the theoretical and practical advantages resulting from this investigation, I have undertaken, in my first lecture, to illustrate the *special psychological attributes of the physician*—to claim for the cultivators of medical science higher and more exalted functions than those usually assigned to them—to consider the physician in his *spiritual* character, as having at his command, and under his control, a *medicina mentis* as well as a *medicina corporis*—agents of great power and magnitude—which have not been sufficiently recognised or appreciated. It will be my object to establish the close connexion between the SCIENCE OF MIND, and the SCIENCE AND PRACTICE OF MEDICINE, and to illustrate the true philosophic character of the professors of the healing art. “Δει μεταγεῖν τὴν σοφίαν εἰς τὴν ἰατρικὴν, καὶ τὴν ἰατρικὴν εἰς τὴν σοφίαν” ἰατροῦ γὰρ φιλοσοφὸς ἴσθεις.” *

We form but a low and grovelling estimate of our high destination—of the duties of our dignified vocation, *if we conceive that our operations are limited to a successful application of mere PHYSICAL AGENTS*. God forbid that we should thus vilify ourselves, and degrade our noble science! “A physician whose horizon is bounded by an historical knowledge of the human machine, and who can only distinguish terminologically and locally the coarser wheels of this piece of intellectual clockwork, may be, perhaps, idolized by the mob; but he will never raise the Hippocratic art above the narrow sphere of a mere bread-earning craft.”† The physician is daily called upon, in the exercise of his profession, to witness the powerful effect of mental emotion upon the material fabric. He recognises the fact, although he may be unable to explain its rationale. He perceives that moral causes induce disease, destroy life, retard recovery, and often interfere with the successful operation of the most potent remedial means exhibited for the alleviation and cure of bodily disease and suffering. Although such influences are admitted to play an important part, either for good or for evil, I do not conceive that, as

* Hippocrates.

† Schiller.

physicians, we have sufficient appreciation of their great importance.

"If a patient dies," says M. Reveillé-Parise, "we open his body, rummage among the viscera, and scrutinize most narrowly all the organs and tissues, in the hope of discovering lesions of some one sort or another; there is not a small vessel, membrane, cavity, or follicle, which is not attentively examined; the colour, the weight, the thickness, the volume, the alteration—nothing escapes the eye of the studious anatomist. He handles, touches, smells, and looks at everything; then he draws his conclusions one way or another. One thing only escapes his attention; that is, he is looking at merely organic effects, forgetting all the while that he must mount higher up to discover their causes. These organic alterations are observed, perhaps, in the body of a person who has suffered deeply from mental distress and anxiety; these have been the energetic cause of his decay, but they cannot be discovered in the laboratory or the amphitheatre. Many physicians of extensive experience are destitute of the ability of searching out and understanding the moral causes of disease; they cannot read the book of the heart, and yet it is in this book that are inscribed, day by day, and hour by hour, all the griefs, and all the miseries, and all the vanities, and all the fears, and all the joys, and all the hopes of man, and in which will be found the most active and incessant principle of that frightful series of organic changes which constitute pathology. This is quite true—whenver the equilibrium of our moral nature is long or very seriously disturbed, we may rest assured that our animal functions will suffer. Many a disease is the *contre-coup*, so to speak, of a strong moral emotion; the mischief may not be apparent at the time, but its germ will be nevertheless inevitably laid." *

In proportion as we recognise our psychological character and position, and estimate the effect of these spiritual agents, shall we be successful at the bedside, elevate ourselves in the social scale, and not only deserve, but command, the respect of the public, and place the science of medicine upon the highest vantage-ground of which it is susceptible. How is it possible for us to influence the minds of others if we have no accurate knowledge of the constitution and operation of our own understandings? As well might the physician administer, for the

* "On Moral Therapeutics." Paris.

relief of an acute malady, a material agent of whose properties and *modus operandi* he is avowedly ignorant.

“He that would govern others, first should be
The master of himself, richly endued
With depth of understanding, height of knowledge.”

MASSINGER.

Referring generally to the present aspect of that branch of philosophy whose claims I am now advocating, I would, *in limine*, observe, that the advancement of mental science has of late years been greatly retarded by the prejudices which have prevailed in reference to all abstract metaphysical investigations. An impression has existed, that this inquiry unfitted the mind for the contemplation of subjects more immediately associated with the useful and practical affairs of every-day life; that the researches of metaphysicians served only to darken, bewilder, and dazzle the understanding, and to teach the use of pedantic jargon, and of obscure and transcendental phraseology. Hence arose the sarcasm, that to recommend a person to engage in the study of metaphysics was a delicate and indirect mode of suggesting the propriety of subjecting him to the restraint of an asylum. “I am the person you wish to see,” said the illustrious Plato to his foreign guests, who desired an introduction to the grave philosopher, under the impression that they were to see a man exhibiting qualities very different from those possessed by ordinary mortals. Does, I would ask, the mind grow severe in proportion to its enlightenment? Why should a knowledge of the most exalted department of philosophy unfit us for the active pursuits of life, or for the society of mankind? Need we be surprised at the attempts which have been made, in the present utilitarian age, to depreciate the study of metaphysical philosophy, when we take a retrospective glance at its history. The modern metaphysician is engaged in more useful and loftier speculations than that of considering whether the *essence* of mind be distinct from its *existence*, and what are the qualities inherent in it as a nonentity? Whether angels passed from one point of space to another without passing through the intermediate points? Whether they can visually discern objects in the dark? Whether more than one angel can exist at the same moment in the same physical point? Whether they can exist in a perfect vacuum,

with any relation to the absolute incorporeal void? Whether, if an angel were *in vacuo*, the void could still be termed perfect? These, and similarly abstruse and absurd speculations, seriously occupied the patient attention of a few of the learned schoolmen and theologians of former times, and gave rise to the idea of the science of metaphysics being the art of talking grave nonsense upon subjects beyond the limits of the human understanding. We are not justified, however, in any wholesale condemnation of these apparently profitless and Quixotic speculations. May we not use the language of the founder of the Inductive Philosophy, and say of the ancient schoolmen, that "in seeking for brilliant impossibilities they sometimes discovered useful realities."

Bacon, when referring to the researches of the alchemists for the philosopher's stone, says, that they performed the office of the husbandman, who, in seeking for a hidden treasure, turned up the soil, and pulverized the earth, thereby rendering it better fitted for the purposes of vegetation. Although the schoolmen were baffled in their attempts to discover the essence of the soul, and to ascertain with any degree of satisfaction to their own minds the precise number of angelic spirits who could *pirouette* at the same instant upon the point of a needle, they nevertheless opened a path for the philosopher, amidst the dreary forest which he had to traverse, and pointed out to him the dangerous portions of his journey, in which they themselves had stumbled and fallen.

Modern Metaphysics, and its sister science, Theology, hold the same relations to the rhapsodies of the schoolmen as modern chemistry does to the speculations of the alchemist. No right-thinking men would repudiate the study of modern chemistry on account of the obscure and apparently profitless researches of the alchemists: by parity of reasoning, are we justified in denouncing the serious and patient study of mental philosophy, on account of the scholastic jargon, nonentities, unmeaning generalities, and inanities, of some of the ancient metaphysicians?

In forming an estimate of the value of any branch of philosophical inquiry, we must be cautious how we apply the interrogatory, *cui bono?*—neither must we adopt as our model of imitation the mathematician, who, refusing to admit that any advantage could result from the study of a science not directly related to his own favourite study, exclaimed, when recommended to read Milton's "Paradise Lost," "What does it prove?"

Are the lofty emotions, the glorious imagery, the sublime speculations, the melodies that have charmed our ear, elevated our thoughts, improved our hearts, ennobled our nature, purified our manners, and thrown rays of sunshine over the dreary and thorny path of life, to be dismissed from our contemplation because they have no obvious and direct relationship to the practical business of life? Let us not encourage the vulgar prejudice against those exalted inquiries that have no apparent or intimate association with the science of medicine, which constitute the charm and poetry of life, and exercise a powerful influence upon the intellectual progress of nations, the civilization of the world, and the character, happiness, and destiny of man!

“——— Desolater! who shall say
Of what thy rashness may have reft mankind?
Take the sweet poetry of life away,
And what remains behind?”

Goëthe, when referring to the healthful influences of imaginative literature upon the heart and intellect, eloquently observes,—“When the man of the world is devoting his days to wasting melancholy for some deep disappointment, or in the ebullience of joy is going out to meet his happy destiny, the lightly-moved and all-conceiving spirit of the poet steps forth to be the sun from night to day, and, with soft transitions, tunes his harp to joy or woe. From his heart, its native soil, springs up the lovely flower of wisdom; and if others, while waking, dream, and are pained with fantastic delusions from their every sense, he passes the dream of life like one awake, and the strangest incidents are to him a part both of the past and of the future. And thus the poet is at once a teacher, a prophet, and a friend of gods and men. At the courts of kings, at the tables of the great, beneath the windows of the fair, the sound of the poet was heard, when the ear and soul were shut to all beside; and men felt as we do when delight comes over us, and we pause with rapture, if, among dingles we are crossing, the voice of the nightingale starts out touching and strong. The poets found a home in every habitation of the world, and the lowliness of their position exalted them the more. The hero listened to their songs, and the conqueror of the earth did reverence to the poet, for he felt that without poets his own wild and vast existence would pass away and be forgotten for ever.”*

* Wilhelm Meister.

Would that I could, in equally lofty, fervid, and touching eloquence, impress upon others the conception which I myself have formed of the value—the practical importance—to the physician, of a more general acquaintance with those branches of polite literature which serve to chasten the taste, discipline the mind, develop holy aspirations after truth, invigorate the understanding, improve the heart, and keep in abeyance those corroding emotions which often embitter our existence, engender disease, and shorten the duration of human life. The science of mind has been truly designated "*the science of ourselves*," of all that surrounds us, "of everything which we enjoy and suffer, or hope and fear; so truly the science of our very being, that it would be impossible for us to look back on the feelings of a single hour without constantly retracing phenomena that have been there, to a certain extent, the subject of our analysis and arrangement. The thoughts and faculties of our intellectual frame, and all which we admire as wonderful in the genius of others; the moral obligation which, as obeyed or violated, is ever felt by us with delight or with remorse; the virtues of which we think as often as we think of those whom we love, and the vices we ever view with abhorrence or with pity; the traces of divine goodness, which never can be absent from our view, because there is no object in nature which does not exhibit them; the feeling of our dependence upon the gracious Power that formed us; and the anticipation of the state of existence more lasting than that which is measured by the few beatings of our feeble pulse,—these, in their perpetual recurrence, impress upon us the vast importance of a knowledge of the philosophy of the human mind."*

When referring to the influence of such studies upon the mind, Burke, with great eloquence and truth, observes, that "whatever progress may be made towards the discovery of truth in this matter, we shall not repent the pains we have taken in it. The use of such inquiries may be very considerable. Whatever turns the soul inward on itself, tends to concentrate its forces and to fit it for greater and stronger flights of science. By looking into physical causes, our minds are opened and enlarged, and in this pursuit, whether we take, or whether we lose our game, the chase is certainly of service. Cicero, true as he was to the academic philosophy, and consequently led to reject the certainty of phy-

* Browne.

sical as of every other kind of knowledge, yet truly confesses its great importance to the human understanding : ‘*Est animorum ingeniorumque nostrorum naturale quoddam quasi pabulum consideratio contemplatioque nature.*’ If we can direct the light we derive from such exalted speculations upon the humbler field of the imagination, whilst we investigate the springs and trace the courses of our passions, we may not only communicate to the taste a sort of philosophical dignity, but we may reflect back on the severer sciences some of the graces and elegancies of taste, without which, the greatest proficiency in those sciences will always have the appearance of something illiberal.”

This science, apart altogether from its direct utility, has other great and obvious advantages, which, in the absence of more conclusive recommendations in its favour, ought to demonstrate to us the importance and value of a knowledge of our own mental constitution. The discipline—the training—the expansion—which the mind undergoes in the study of its own operations, are of themselves benefits not lightly to be appreciated. The cultivation of habits of accurate observation and reflection, of patient attention, of rigid induction, of logical ratiocination, qualifies the mind for the more ready pursuit of those branches of knowledge that are considered to be more closely connected with the practical and active business of life. The mental *gymnasium* to which I refer is admirably fitted for the development, regulation, and cultivation of those faculties of the mind upon the right exercise of which depends our intellectual advancement and happiness.

It is not my wish, in advocating the claims of mental philosophy, to undervalue those sections of knowledge which have an almost exclusive reference to the *physical* sciences. I am quite disposed, however, to admit that it is an unfortunate effect of mere physical inquiry, when exclusively directed to the properties of external things, to render the mind in our imagination subordinate to the objects to which it is directed; the faculties are nothing, the objects are everything. The very nature of such inquiry leads us perpetually without to observe and arrange, and nothing brings us back to the observer and arranger within; or if we do occasionally cast an inquisitive glance on the phenomena of our thought, we bring back with us what Bacon, in his nervous

language, calls the "*smoke and tarnish of the furnace.*" The mind seems to be broken down to the littleness of the objects which it has been habitually contemplating; and we regard the faculties that measure earth and heaven, and that add infinity to infinity, with a curiosity of no greater interest than that with which we investigate the angles of a crystal, or the fructification of a moss. Such are represented by a philosopher* of high standing, as the inevitable consequences of a too exclusive devotion to the study of mere physical phenomena. But I would advance a step further, and maintain that a knowledge of the philosophy of the human mind is indispensable to the successful prosecution of physical science; that without a knowledge of mental phenomena, a high degree of perfection and accuracy could not be attained in any of the collateral branches of knowledge.

I cannot dismiss this division of my subject without directing your attention to another branch of study intimately associated with the science of medicine and mental philosophy, and one most essential to the education of the psychological physician. I allude to *logic*, or the art of reasoning. Need I advance an argument, to establish the importance of a more general knowledge of that science which analyses the operations of the human understanding in the pursuit of truth. Mr. Stuart Mill places this science upon its right basis, when he argues that logic is not (as some maintain) the science of *belief*, but of *proof* or *evidence*. Its object is not to teach the physician what the symptoms are which indicate disease: these he must acquire from his own experience and observation, or from that of others. But logic, as he maintains, sits in judgment on the sufficiency of that observation and experience to justify his rules, and on the sufficiency of his rules to justify his conduct. It does not give him proofs, but teaches him what makes them proofs, and how he is to judge of them. Logic can never show that the fact A proves the fact B, but it can point out to what conditions all facts must conform, in order that they may prove other facts. "It is," says Mr. Mill, "to use the words of Bacon, the *ars artium*, the science of science itself. All science consists of *data* and of conclusions from these *data*, of proofs and what they prove. Now, logic points out what relations must subsist between data and whatever can be con-

* Browne.

cluded from them; between proof and anything which it can prove." It is not sufficient to establish that a knowledge, a technical knowledge, of the process of reasoning, an apt appreciation of the use and application of recognised logical formulæ, is not actually necessary to enable a person to reason rightly, in order to prove that an acquaintance with the science is not indispensable to the physician. It is true, as Dr. Gregory observes, that a sailor may navigate a ship, who is ignorant of the principles of navigation, and a person may construct a dial, who knows nothing of the principles of astronomy, spherical trigonometry, or the projection of the sphere. Extensive experience, a natural quickness of apprehension, an intuitive perception of the relationship between phenomena, a capability of ready generalization, often make a man a good practical logician who has no knowledge of a syllogism, or of the elements of logical science. Among the higher order of practical intellects there have been many of whom it was remarked, "how admirably they suit their means to an end, without being able to give any sufficient reason for what they do, and apply, or seem to apply, recondite principles which they are wholly unable to state."

But, as medical philosophers, we must not be satisfied with this natural aptitude or intuitive perception of the principles of logic. The science of medicine is especially amenable to the rules of logical and inductive reasoning. Having to unravel the mysterious phenomena of life, the investigation and treatment of those deviations from its normal state, termed disease, peculiarly expose us to many sources of error and fallacy, unless we cautiously keep in view the great truths inculcated by the Baconian philosophy, and are guided by the unerring principles taught by its illustrious founder—

"The great deliverer, he who from the gloom
Of cloistered monks, and jargon-teaching schools,
Led forth the true philosophy."

There are but few gifted men in our profession, or in any other walk of modern science, of whom we could, in justice, say that they were able to dispense with the patient study of facts, or with the recognised *formule* of logical and inductive science. It was remarked of the immortal Newton, that he appeared to arrive *per saltum* at a knowledge of principles and conclusions that ordinary mathematicians only reached by a succession of

steps, and after the result of much labour, long-continued and profound meditation. It is only by strictly applying the principles of the inductive process of reasoning—by which we conclude that what is true of certain individuals of a class, is true of the whole class; or that which is true at certain times, will be true under similar circumstances at all times—that medicine will take rank with the exact sciences, and its cultivators have a right to claim a foremost position among the distinguished philosophers of the day. In the study of medicine, perhaps more than in any other science, we are peculiarly exposed to the danger of adopting false facts, of being seduced by specious and hasty generalizations, and led into error by deducing general principles from the consideration of a few particulars—the bane of all right and sound reasoning—the foundation of all bad philosophy. It is on this account that logic should form a part of the curriculum of our medical schools.

In analysing the passions, it is our duty to ascertain, if possible, the nature of the mysterious union existing between particular organic tissues and certain emotions of the mind. Why, for example, should the passion of fear specially affect the heart, and, if of long continuance, induce actual physical changes in the centre of the circulation? How can it be explained that in certain diseases of the heart the patient often manifests a morbid apprehension of some approaching calamity? Again, it is for the medical psychologist to ascertain the *modus operandi* of the passion of anger upon the hepatic secretion, and the re-action of disease of the liver upon the irascible temperament. How does fear cause diarrhœa, and predispose the system to the action of contagion? Again, may it not be possible to elucidate the action of terror in suddenly arresting hæmorrhage; and explain why the apprehension of threatened disgrace checks attacks of convulsive disease arising from a morbid principle of imitation, and arrests the progress of epidemic suicide? The emotion of hope is known specifically to influence the respiratory functions, and in the last stages of pulmonary disease the patient is often buoyed up with the certain expectation of recovery, whilst the angel of Death is hovering about him. “How frequently have I seen the delicate female, in the last stage of pulmonary consumption, lighted up, and everything assume a bright and cheerful aspect about her. New schemes of happiness have been contemplated,

new dresses prepared, and everything was brilliant in her prospects, whilst her parents lived under the greatest apprehension and solicitude, the physician seeing nothing but inevitable fate for the poor victim whose distemper has deluded her.”*

In endeavouring to solve these and other subtle points in psychology, we must be prepared to encounter the ridicule and opposition of those who taboo all such speculations as futile and presumptuous. In our patient and persevering study of abstract philosophical truth, we must not be discouraged by such indifference and opposition. It may be legitimately within the compass of the medico-psychologist, aided by discoveries in physiological and other collateral sciences, to unravel the nature of that mysterious union existing between mind and matter; and to trace the origin and source of the emotions, and the mode in which spirit and matter reciprocally act upon each other. The man devoted to the discovery of these great truths may be compelled to resign himself to the neglect and contumely of his contemporaries. Such, alas! has too often been the fate of those great and noble spirits who have shed undying lustre on the land which gave them birth, and the record of whose deeds forms the brightest spot in our country's annals. It is the recollection of the history of such martyrs to science as Harvey and Jenner, which induces us to exclaim with Coleridge, “Monsters and madmen are canonized, whilst Galileo is buried in a dungeon!” A Brahmin crushed with a stone the microscope that first developed to his vision living things among the vegetables of his daily food. Professor Sedgwick, when referring to this fact, observes, “The spirit of the Brahmin lives in Christendom. The bad principles of our nature are not bounded by *caste* or *climate*, and men are still to be found, who, if not restrained by the wise and humane laws of their country, would try to stifle by personal violence, and crush by brutal force, any truth not hatched by their own conceit, and confined within the narrow fences of their own ignorance.”

In analysing the nature of the passions, ascertaining their connexion with each other, mode of action upon the system, and special relationship to certain organic structures, it is necessary to recollect that they are planted in us for wise, beneficent, and noble purposes; and it is only when they are abused, and not

* Sir H. Hallford.

subjected to a healthy discipline, that they induce disease, and affect the duration of life. While the impressions made upon the nervous system are moderate, and restrained within due bounds—when there is a natural gratification of the passions, guided and ennobled by reason, the effect produced upon the system is rather of a beneficial than of a pernicious nature. The “passions are, in morals,” says Sydney Smith, “what motion is in physics: they create, preserve, and animate; and without them, all would be silence and death. Avarice guides men across the deserts of the ocean; Pride covers the earth with trophies, mausoleums, and pyramids; Love turns men from their savage rudeness; Ambition shakes the very foundation of kingdoms. By the love of glory, weak nations swell into magnitude and strength. Whatever there is of terrible, whatever there is of beautiful in human events, all that shakes the soul to and fro, and is remembered while thought and flesh cling together,—all these have their origin in the passions. As it is only in storms, and when their coming waters are driven up into the air, that we catch a glimpse of the depths of the ocean; so it is only in the season of perturbation that we have a glimpse of the real internal nature of man. It is then only that the might of these eruptions, shaking his frame, dissipate all the feeble coverings of opinion, and rend in pieces that cobweb veil with which fashion hides the feelings of the heart. It is then only that Nature speaks her genuine feelings; and as at the last night of Troy, when Venus illumined the darkness, and Æneas saw the gods themselves at work, so may we, when the blaze of passion is flung upon man’s nature, mark in him the signs of a celestial origin, and tremble at the invisible agent of God.”

“Who that would ask a heart to dulness wed,
The waveless calm, the slumber of the dead?”

CAMPBELL.

Having, I trust, established the necessity of a more general acquaintance with mental philosophy, it is now my province to demonstrate its practical application as a therapeutic agent in the hands of the physician.

From the annals of empiricism the psychological physician may glean many useful lessons. “*Fas est et ab hoste doceri*,” is a maxim as applicable to medical as it is to moral and political science. May not the success that sometimes follows the admi-

nistration of an extravagantly eulogized nostrum often depend upon the *moral confidence* inspired in its much-vaunted efficacy? Medicine often has a curative efficacy *because the patient is told and believes that it will cure*—is unerring in its effects—infallible in its results. Let us learn a lesson from this fact, and remember the observation of Coleridge, that “he is the best physician who is the most ingenious inspirer of hope.” How often has a disease which has baffled the skill of the scientific, practical man, vanished before the spell of a village witch. A patient afflicted with a malady which refused to yield to the demands of legitimate medicine, surrendered himself into the hands of a notorious quack. A friend endeavoured to rescue him from the grasp of the charlatan. He saw the daily fee accompanying the daily deceit, and expostulated; when the patient exclaimed, “For God’s sake, destroy not the hopes that man holds out to me: upon them I live! without them I die!”

In acute attacks of disease, the patient who has the least fear of dying has, *ceteris paribus*, the fairest prospect of recovery. The tonic and often stimulating influence of HOPE not only arrests the progress of organic mischief, but invigorates the system, thus warding off the approach of disease. Aretæus, appreciating the importance of rousing and supporting, by means of moral agents, the nervous system, when in a state of depression and debility, expressly counsels the patient to be of good heart, and advises the physician to entertain him with agreeable conversation, and to do his utmost to encourage hope and confidence. With a view of abstracting the mind of the patient from a contemplation of his own sufferings, he directs that his mind should be diverted with the sight of plants in full bloom, and agreeable paintings; and suggests that the bed of the patient should be placed near a window commanding a beautiful prospect. The chamber, he says, should be strewn with flowers; amusing books should be read, and the soothing influences of music should be brought to bear upon the moral treatment of the case. The mind of the patient should not be permitted to dwell upon his physical malady; and he should be constantly buoyed up with the hope of recovery. When speaking of the plague of Athens, Thucydides says that “the most affecting circumstance connected with the epidemic was the great and fearful mental dejection which accompanied the attack. The mind appeared at once to sink into

despair, and the patient often gave himself up without a struggle."

We all fully appreciate the potency of mental depression among the predisposing causes of contagious disease. During the prevalence of epidemic diseases, it may be a matter worthy of consideration whether there are not some powerful MORAL REMEDIES, by means of which they may be shorn of much of their virulence. It is a question entitled to serious discussion, what are the best means within our reach to effect so desirable an object? Many may smile at the idea of attempting, by any mental measures, to create a revulsion in the public mind, and thus to destroy, if possible, all fear and apprehension. When Rome was threatened with pestilence, the public authorities marched in solemn procession to the national temple, and means were adopted for appeasing the anger of the gods. The psychological effect of this, to our minds, superstitious proceeding, was to allay public apprehension, and to excite hope and confidence. May not we adopt measures somewhat analogous to arrive at similar results? Have we not within our power effectual means of acting upon the public mind *en masse*, for creating, during the existence of those fearful panics which so often accompany the prevalence of pestilential diseases, a new turn to the current of thought, and of dispelling unnecessary fears and morbid apprehensions? God has so intimately associated the spiritual with the material portion of our organization, that He will not consider that we are slighting His dispensations, or making light of His awful providence, if, in obedience to His will, and in conformity to the recognised laws influencing the mysterious union of mind and matter, we adopt moral or mental means for curing or preventing disease.

Such being a view of the question sanctioned by Religion and Science, it behoves us to consider whether some measures might not be adopted for the purpose of abstracting the public mind from its own depressing apprehensions, thus rendering the system less liable to be acted upon by those physical agents alleged to give origin to the disease. This is only suggestive; it may be entirely impracticable; but whether it be so or no, I have not the slightest doubt of the soundness of the *principle*, and of the importance of adopting every legitimate means of allaying any panic that may occur, and of looking beyond the mere physical means at our disposal, for the prevention and cure of disease.

It is our duty, during these fearful epochs, to dismiss from the mind the contemplation of subjects calculated to awaken gloomy apprehensions, to depress the feelings, and exhaust the nervous energy. Every reasonable mode of inducing cheerfulness and serenity should be encouraged. Constant and agreeable occupation will do much good. An effort should be made to excite emotions of a pleasurable character. The exercise of charitable feelings; the determination to keep in abeyance all the corroding passions, such as anger, jealousy, revenge, covetousness, and the effort to cultivate "love, peace, and good-will toward men," will be found of positive advantage in invigorating the *physique*, and thus rendering innocuous the poison of contagion.

We should never forget that those whose vital powers are debilitated are the most susceptible to epidemic maladies,—that the depressing emotions induce this predisposition more certainly than any other cause. A humble reliance on the will of God, a well-sustained piety and cheerfulness, are the safest and most legitimate means (apart from the use of physical agents) of preventing the spread of epidemic maladies. During the prevalence of any such visitation, it is our duty individually, as well as nationally, to fortify and strengthen the system, by resolutely determining not to yield to useless fears and childish apprehensions; and, so far as it is in our power, to inspire ourselves and our neighbours with energy and courage, and, as a powerful prophylactic agent, to cultivate

" Sweet, unanxious quiet for the mind."

They are the happiest, the healthiest, and the longest-lived, who systematically cultivate *ease of mind*. On this subject a popular writer has justly observed, that "This happy state of mind is in a great measure within the reach of all who diligently seek after it. It does not depend upon the amount of our worldly possessions, but upon our mode of using them not upon our ability to gratify our desires, but upon our regulation of them. They who diligently cultivate the habits necessary to attain ease of mind, place themselves almost above its disturbance. To the mortifications of disappointed ambition they are not at all exposed, and by the crosses of adverse fortune very little; whilst unavoidable afflictions in the well-constituted soften rather than sour the mind, and cannot be said to destroy its ease. Like cypresses, they throw a shade over the current, but in no way disturb its smoothness. Strict and

constant discipline can insure ease of mind in poverty and privation.”*

To the physician specially occupied in the investigation of the deranged conditions of the mind, how indispensable is a knowledge of mental philosophy! Unless acquainted with the constitution of the human understanding, we are but ill adapted to unravel or appreciate the intricate phenomena of its disordered action, or to apply for their cure or alleviation those medical and moral agents which advanced science has placed within our reach. Before the morbid mental state can be diagnosed or understood, it is necessary for the physician to be intimately conversant with some normal standard of comparison, otherwise he possesses no test by means of which he can arrive at a safe conclusion. Who would confide in the judgment of a physician who endeavoured, by means of the stethoscope, to ascertain the nature of any particular disease of the heart and lungs, if he were ignorant of the normal action of those organs! Is not a knowledge of the healthy operations of thought as necessary to the physician who is called upon to pronounce whether, in any given case, an apparently suspicious deviation from the normal condition of the intellect is or is not the effect of disease?

Is it necessary that I should seriously endeavour to establish the importance, not only of a knowledge, but of a profound knowledge, of the human understanding, its affections, propensities, emotions, and its instincts, to those occupied in the study of mental alienation, and specially and personally engaged in the treatment of the insane? Alas! an acquaintance with this section of philosophy is rarely deemed necessary in the education of those intended for psychological practice. Hitherto, with few exceptions, those engaged in this branch of practical medicine have not only been grossly ignorant of the constitution of the human mind, but unacquainted with the first principles of medical science. It is only in recent times that it has been considered necessary to ascertain whether parties desiring to undertake the care and treatment of the insane† have any other qualification to

* “The Original,” by Walker.

† When asylums for the insane are entrusted exclusively to physicians acquainted with the *anatomy of the human mind*, or, in other words, with the science of *medical psychology*, they will realize the conception of the great Esquirol, and become “instruments of cure, and, in the hands of the skilful physician, most powerful therapeutic agents against mental maladies.”

recommend them to the office than the possession of a house of certain dimensions, and a sufficient amount of capital to enable them to carry into effect the mere commercial speculation. A surgeon, before he undertakes the performance of an operation, or the treatment of a serious, or even of a trifling injury, is expected to have devoted many years to the study of anatomy and the practice of surgery. A physician is considered to be conversant with the different branches of medical science; to have watched by the bedside the operation of various medicinal agents, exhibited in certain states of disease; and to be thoroughly conversant with the science of therapeutics and the phenomena of morbid action. But a knowledge of the most intricate, complicated, and subtle phenomena with which we have to deal—namely, the faculties of the human mind—is considered to come by intuition, no preparatory psychological education being deemed necessary to those devoted to the treatment of the insane. What would be said of our own mental condition, if we were to place in the hands of a blacksmith a delicate chronometer, for the purpose of having its movements regulated? And should we not expose ourselves to severe animadversion, if we permitted a man ignorant of the anatomical construction of the body, to cut down upon the subclavian artery, for the purpose of applying a ligature to the vessel? Is it less absurd; less destructive to the integrity of the intellectual part of our constitution, to place under the care of persons grossly ignorant of the elements of the science of mind, cases of disease requiring, above all others, for their judicious and successful management, an intimate knowledge of healthy mental phenomena? “Great powers of reason are requisite,” says Vogel, “to understand men destitute of reason.” To treat the various phases of disordered mind with any hope of a successful issue, requires on the part of the psychological physician qualities of mind rarely seen in combination—tact, presence of mind, judgment, a ready appreciation of intricate morbid mental phenomena, a delicacy of taste, a high *morale*, a steadiness of purpose, elevation of character, great command of temper, and volitional power and resolute determination not to allow any amount of provocation to interfere with that calmness and serenity so indispensably necessary on the part of those brought into immediate association with the insane. If the mind be the instrument upon which we are to operate in carrying out any systematic plan of moral treatment—if it be the duty of

the physician to perseveringly "combat with delusions and hallucinations, and to substitute for them correct and healthy impressions; to strengthen these impressions by judicious and repeated repetitions; remove perverted trains of reasoning—replace them by correct induction, and give them the power and influence of habit and frequent association:" how, I ask, can he make any progress in this mode of treatment so long as he is ignorant of the *material* with which he is to work—in fact, with the faculties of the human understanding? If the man who has the advantage of an ordinary medical education is, on account of his ignorance of the philosophy of mind, obviously unfitted for the serious duties of treating its disorders scientifically and successfully, what language can convey our impression of the folly, the barbarity and heartlessness, of entrusting the management of the insane to those who are not members of the profession at all, and who have enjoyed no more psychological or general education than that derived from their having acted as attendants in asylums, or that which they have received at a village school? Need we feel surprise at the little advancement made in the science of cerebral pathology, and the amount of public odium which has, alas! for so many years attached to those specially engaged in this anxious and important branch of practice; when we consider into whose hands this class has unhappily fallen? I trust, however, the day is not very remote, when the psychological physician, engaged in the treatment of insanity, will take his proper and legitimate position in the ranks of honourable and scientific men; and the opprobrious epithet with which the vulgar and illiterate assail him will be expunged from the vocabulary. When that epoch arrives, the public and the profession will esteem, respect, and venerate those who, at great and heroic personal sacrifices (often of health, life, and reason), devote their acquirements, energies, and talents, for the benefit of this section of the afflicted family of man. "I am at length rewarded," says Müller,* "since after twenty-six years' intercourse with the insane, I have not become insane myself." In a letter to Pinel it is observed, "The labourer in lead-works is thankful if he escapes lameness, and the medical attendant of a madhouse, if he does not there leave his reason. A more deliberate sacrifice to the mightiest good of mankind is not conceivable."†

* Physician to the Julius Hospital, Wurzburg.

† "Aspects of Medical Life," by Dr. Mackness.

There is another practical point connected with the study of medical psychology, which comes within the range of our investigation. It has reference to the influence of the will upon the physical organism. It has been maintained that the persistent direction of the volitional power to a particular organ or structure will eventually induce a morbid activity in the part, and give rise to lesions in the organic tissue itself. In many cases of hypochondriasis, a disease often associated with some form of visceral derangement, I have no doubt the sufferings, both mental and physical, are often aggravated by the patient imagining some particular structure or viscus to be the seat of disease; and from that circumstance, the attention being constantly directed to the organ, actual molecular changes in the organic elements of the part are induced. The persistent current of mental impulse, emotion, or volition towards an organ, impels to it an amount of nervous energy and blood sufficient to derange the circulation, and thus interfere with the function of nutrition, and induce organic alterations in the tissue. Does this fact admit of a psychical explanation. Viewing practically the operations of volition, I would ask whether it be not possible to prevent or cure actual physical and mental disease by an effort of the will; and if so, what is the rationale of the process? The will, by a constant exercise of its powers, has been known to acquire an influence over the involuntary organs. The case of Colonel Townsend is familiar to us all. This gentleman, by an effort of the will, could easily suspend the action of the heart, and thus induce, for a period, all the symptoms of apparent death. Celsus refers to a priest who exercised the same power over all the vital functions. In the language of Burton, "he could separate himself from his senses when he list, and lie like a dead man, void of life and sense."* Great expecta-

* A Colonel Townsend, residing at Bath, sent for Drs. Bayard and Cheyne, and a Mr. Skrine, to give them some account of an odd sensation, which he had for some time felt, which was, that he could expire when he pleased, and by an effort come to life again. He insisted so much on their seeing the trial made, that they were forced at last to comply. They all three felt his pulse, which was distinct, and had the usual beat. He then composed himself on his back for some time. By the nicest scrutiny, they were unable to discover the least sign of life, and at last were satisfied that he was actually dead; and were just about to leave him, with the idea that the experiment had been carried too far, when they observed a slight motion in the body, and the pulsations of the heart returned, and he quite recovered. In the evening of the same day, however, he composed himself in the same manner, and really died.

tions may be entertained of recovery from an attack of illness, if the patient, with a recognition of his duty of submission to the will of God, resolutely determines not unnecessarily to yield to physical disease. The determination to be well, will, in certain morbid states of the system, do much to facilitate recovery, and will materially aid the physician in the exhibition of his curative agents. The author of *The Original* relates a curious circumstance connected with his own bodily health, which illustrates the power which the mind exercises over physical disease. He says: "Some months before I was born, my mother lost a favourite child by illness, owing, as she accused herself, to her own temporary absence; and that circumstance preyed upon her spirits and affected her health to such a degree, that I was brought into the world in a very weakly and wretched state. It was supposed I could not survive long, and nothing, I believe, but the greatest maternal care and tenderness preserved my life. During childhood, I was very frequently and seriously ill, often thought to be dying, and once pronounced to be dead. I was ten years old before it was judged safe to trust me from home at all, and my father's wishes to place me at a public school were uniformly opposed by my various medical advisers, on the ground that it would be my certain destruction. Besides continued bilious and inflammatory attacks for several years, I was grievously troubled with an affection of the trachea; and many times, after any excess in diet or exertion, or in particular states of the weather, or where there was new hay or decayed timber, my difficulty of breathing was so great, that life was miserable to me. On one occasion, at Cambridge, I was obliged to send for a surgeon in the middle of the night, and he told me, the next morning, that he thought I should have died before he could have opened a vein. I well recollect the relief it afforded my agony, and I only recovered by living for six weeks in a rigidly abstemious and most careful manner. During these years, and for a long time after, I felt no security of my health. At last, one day, when I had shut myself up in the country, and was reading Cicero's treatise *De Oratore*, some passage, I forget which, suggested to me the expediency of making the improvement of my health my study. I rose from my book, stood bolt upright, and determined to be well."*

Mr. Walker then proceeds to narrate, in a number of

* "The Original," by Walker.

amusing essays, how he carried his resolution into effect. The result was a complete restoration to health, which he enjoyed until a short period previous to his death.

For the cure of many of the disorders of the nervous system, it is often necessary for "the mind to minister to itself." If the patient confess an inability, in the more advanced stages of mental disease, by an effort of volition to "pluck from the memory a rooted sorrow," he undoubtedly has the power in the earlier or incipient forms of disordered mind, to destroy, by a resolute effort of the will, "those false creations of the heat-oppressed brain," those "thick-coming fancies," and those irregularities of thought and conduct, which, if permitted to run riot and uncontrolled, would induce the more serious, dangerous, and perhaps incurable forms of mental derangement. "By endeavouring, from benevolent motives, to smother the expression of our sorrows," says Dr. Reid, "we often mitigate their inward force. If we cannot imbibe the spirit, it is often profitable, as well as good-natured hypocrisy, to put on the appearance of cheerfulness."

"By *seeming* gay, we grow to what we seem."

Let us, as psychological physicians, impress upon the minds of those predisposed to attacks of mental aberration and other forms of nervous disease, the important truth, that they have it in their power to crush, by determined, persevering, and continuous acts of volition, the "floating atoms, the minute embryos, the early scintillations" of insanity. Many of the diseases of the mind, in their premonitory stage, admit, under certain favourable conditions, of an easy cure, if the mind has in early life been accustomed to habits of self-control, and the patient is happily gifted with strong *volitional power*, and brings it to bear upon the "scarcely-formed filaments of mental disease." "We should have fewer disorders of the mind if we could acquire more power of volition, and endeavour, by our energy, to disperse the clouds which occasionally arise within our own horizon; if we resolutely tore the first threads of the net which gloom and ill-humour may cast around us, and made an effort to drive away the melancholy images of the imagination by incessant occupation."*

It is sometimes necessary, in the application of moral influences,

* Essays on Hypochondriasis, &c., by Dr. Reid. (German Edition.)

to rouse the apprehensions of our patient by pointing out to him his position as an accountable agent. I cannot better illustrate this psychological function of the physician than by quoting an anecdote which has been recorded of the late Mr. Abernethy. A patient was brought to St. Bartholomew's Hospital with strangulated hernia. As the symptoms became alarming, the propriety of an operation was suggested to him, but he resolutely refused compliance; and although his alarming situation was fully pointed out, he persisted in his determination. On the following day a consultation was held, and it was agreed that no alternative remained but a speedy death, unless the operation were performed. When this was announced to the sufferer, he exclaimed, "I will rather die than submit!" As the surgeon and pupils were leaving the hospital, Mr. Abernethy entered. The position of the patient was at once explained to him. He immediately went to the bedside of the man, when the following conversation ensued:—"Well, well, my good fellow?" said Abernethy.—"They want," replied the patient, "to persuade me to be operated upon; but I would rather die!"—"Well," rejoined Mr. Abernethy, "I am sorry the operation is necessary; but have you thought of what there is after death? There is a day of judgment, and you will and must give an account of yourself to God. God has placed within our hands the means to use, and we must use them. If you refuse to use the means God has thus given, and which we think may save your life, you are, in a measure, answerable for your own death, and must account to God for this, with your other sins." The man appeared much impressed with Mr. Abernethy's appeal, and for a period continued silent and in deep thought. Mr. Abernethy said, "I will leave you for a few minutes to consider the subject." On returning, the man exclaimed, with great eagerness and decision, "I will submit to any operation that is necessary!" The operation was immediately performed, and his life was preserved.*

I have not yet spoken of the conduct of the physician whose special duty it is to attend and officiate at the period of parturition. There are no occasions when it is so essentially necessary for the medical practitioner to zealously watch the operation of moral causes upon the *physique* of his patient. The successful progress of labour is often dependent upon the temperament of

* Dr. Cooke.

the physician. The patient, anxious about her own state, and nervous as to the issue, watches every movement of the physician—his very attitude—his every look—his walk; his remarks, either addressed to herself, or those in the room, are closely scanned, and have a beneficial or a disastrous influence upon the mind of the patient. In proportion as the obstetric physician recognises the potency of mental agents upon the mind of the patient, and is facile in their adaptation to the idiosyncrasy of those with whom he is brought into contact, will he be successful in the practice of this important section of medical science.

The physician is often called upon, in the exercise of his responsible vocation, to discharge medico-theological functions. It is occasionally our painful duty to sit by the couch of the dying, and to witness the last fatal conflict between mind and matter. It is on such occasions that we have, either in co-operation with the recognised minister, or in his temporary absence, an opportunity of whispering words of comfort and consolation to the wounded spirit, and of directing the attention of the patient, and those immediately about him, to the only true and legitimate source of the Christian's hope. Let us not lightly esteem or neglect the solemn functions thus imposed upon us. It may be our privilege to co-operate with those whose sacred duty it is to inculcate the precepts of our holy religion, and to suggest, without subjecting ourselves to the imputation of officiousness, the *degree* and *kind* of conversation admissible under certain physical or mental states. A zealous but indiscreet clergyman may, by the character of his admonitions, fatally interfere with the successful progress of an acute case of disease, and inadvertently produce an amount of mental and physical depression, from which the patient may never rally. In the exercise of this serious, this important, and imperative duty, the object should be to soothe, not to distract, the mind; to elevate, not to depress, the emotions; to inspire a holy reverence and simple reliance upon that DIVINE BEING who is the FOUNTAIN OF ALL JUSTICE, and the RESERVOIR OF ALL MERCY. Our Saviour should be represented, not as the God of terror, but as a God of LOVE and MERCY. "What painter who has sketched the portrait of our Saviour, ever thought of arming him with thunder? No: love was HIS weapon; and this is the weapon his ministers should chiefly employ."*

* "The Velvet Cushion," by the Rev. J. W. Cunningham.

"Thou, fair Religion, wast designed,
 Duteous daughter of the skies,
 To warm and cheer the human mind,
 To make men happy, good, and wise,
 To point where sits, in love arrayed,
 Attentive to each suppliant call,
 The God of universal aid—
 The God, the Father of us all."

PENROSE.

The physician, whilst officiating under these painful circumstances, may have it in his power to disarm the imagination of the dying, of those unphilosophical, phantasmal, and often superstitious notions with which the morbidly active fancy occasionally invests the act of death itself. Is the fear of death a natural and healthy feeling? Many eminent divines entertain this idea. The instincts of our nature, however, recoil from the thought of dissolution; the soul "shrinks back upon herself" at the idea of annihilation and destruction. This horror of death prevailed to a great extent in ancient times, particularly among the Jews. The weeping and wailing referred to in Scripture (Mark. v. 38) may "be traced to an early tradition among them that an evil spirit, whom they called the 'angel of death,' had special permission to torment persons in their dying hour, and even long after their decease. This angel they represented as standing over the sick man with a drawn sword, then distilling into some part of his body the poisonous death-drop, and afterwards going to sit upon his grave, to terrify his unresting spirit with sounds and sights of woe."*

Hazlitt imagines that the subject of death is made ghastly to the imagination, by our associating with it the idea of life. We think how WE should feel, not how the DEAD feel.

"Still from the tomb the voice of nature cries,
 Even in our ashes live their wonted fires."

"The melancholic appearance of a lifeless corpse, the mansion provided for it to inhabit, dark, close, and solitary, are shocking to the fancy. but it is to the fancy only, not to the understanding; for whoever consults this faculty, will see at the first glance that there is nothing dismal in all these circumstances. If the corpse were kept wrapped up in a warm bed, with a roasting fire in the chamber, it would feel no comfortable warmth therefrom. Were stores of tapers lighted as soon as day sets in, it would see no object

* "Christian Consolation," by the Rev. D. Moore, M.A. 1848.

to divert it. Were it left at large, it would have no liberty, nor if surrounded by company would it be cheered thereby; neither are the distorted features depressions of pain, uneasiness, or distress. This every one knows, and will readily allow, upon being suggested, yet still cannot behold, nor even cast a thought upon these objects without shuddering; for knowing that a living person must suffer grievously under such appearances, they become habitually formidable to the mind, and strike a mechanical horror, which is increased by the customs of the world around us.”*

But if such apprehensions of death haunt and distress the imagination of those eminent for their piety, great natural sagacity, and for their high order of intelligence, they are far from having a general influence. I quite concur in the sentiments expressed by the late Sir Henry Hallford, who, when referring to the calmness, serenity, and Christian resignation exhibited by many at the awful moment of death, says, “Of the great number to whom it has been my painful professional duty to have administered in the last hour of their lives, I have sometimes felt surprised that so few have felt reluctant to go to the

‘—————undiscovered country,
From whose bourne no traveller returns.’

Many, we may easily imagine, have manifested their willingness to die, from an impatience of suffering, or from that passive indifference which is sometimes the result of debility, and extreme bodily exhaustion. But I have seen those who have arrived at a fearless contemplation of the future, from faith in the doctrines which our holy religion teaches; such men were not only calm and collected, but even cheerful, at the hour of death; and I never quitted such a sick chamber without a wish that my last end might be like theirs. Some, indeed, have clung to life anxiously—painfully; but they were not influenced so much by the love of life for its own sake, as by the distressing prospect of leaving children dependent upon them to the mercy of the world, deprived of their parental care; in the pathetic language of Andromache—

‘Νῦν δ’ ἂν πολλὰ παθῇσι, φίλου ἀπὸ Πατρὸς ἁμαρτῶν.’

These indeed have sometimes wrung my heart.”†

* Tucker.

† Sir H. Hallford's Essays and Orations.

Cicero is said to have complained that the fear of death hung over him like the stone of Tantalus. All his philosophy and extraordinary intellectual power did not preserve him from childish apprehensions of death. "*Mors, quæ quasi saxum Tântulo, semper impendet.*"*

Dr. Johnson had always an intense dread of death, even when in the enjoyment of perfect health. He says in one of his letters to Boswell, "I cannot think without emotion of the removal of any one I know from one state to another." In a letter to Dr. Taylor, he exclaims, "O my friend, the approach of death is very dreadful! I am afraid to think of that which I cannot avoid!" He told Dr. Hawkins that he never had a moment in which death was not terrible to him. He died eventually of dropsy. In order to prolong his life, he procured a lancet, with which he was going to puncture his legs, which were much swollen. He was, however, prevented from doing so; and when he was entreated not to do so rash an action, he said that he would not. Shortly afterwards his arm was seen to be moving under the bed-clothes, and upon turning down the clothes, his friends found that he had been plunging a pair of scissors into the calf of each leg. Upon being expostulated with, Dr. Johnson feelingly exclaimed, "I want length of life!—length of life!"

It may be our duty to explain to those labouring under mortal disease, with certain dissolution in immediate prospect, and who express, with what may be termed some degree of truth, a morbid apprehension of the fatal issue, that, reasoning from analogous phenomena, we are not justified in believing that the act of death is accompanied with any physical agony. The violent muscular convulsions simulating epilepsy, which occasionally accompany the act of dying, naturally suggest to the vivid imagination of the bystander the idea of intense suffering. It is within the range of our legitimate function to expose this fallacy, by explaining, that although the patient may apparently suffer much a short period before death, the act of dying cannot, reasoning physiologically, be painful, *consciousness* being then entirely suspended. Dr. Symonds observes that "the practitioner ought to be able to console the friends of the dying, by the assurance

* Cic. Tusc. Desp., v. 40.

that, whatever may have been the previous torture, it must be all over when once those changes begin in which death essentially consists. He must explain to them how, upon the failure of the circulation, the functions of the brain must cease by necessity; that if the cessation of the former be gradual, that of the latter may, and often does, precede it; that if the mortal process begins in the lungs, unconsciousness precedes the want of circulation; and if in the brain, that an injury of this organ, sufficient to affect the lungs and the heart fatally, is sure to annihilate its own sensibility. The muscular spasms, the slow, gasping, and gurgling breathing, the collapsed and distorted features, though in some cases accompanied by feeling, are altogether independent of it. Convulsion is not, as superficial observers often interpret it, the sign of pain, or the result of an instinctive effort of nature to get rid of the cause of pain—it is an affection of the motific, not the sensific part of the nervous system. The pangs of disease may last till within a short period of death, but it is a great error to attribute them to the process that brings them to an end. Such cases are rare; it is far more common for the sensibility to be blunted, or for the cause of pain to subside before the phenomena of dying commence.”*

I will not be guilty of the presumption of attempting to draw aside the veil which conceals from mortal vision the condition of the spirit whilst traversing “these painful passages.”† In vain have the most highly-gifted minds, the most exalted imaginations, and the most sublime flights of poetry, endeavoured to convey to our understanding a conception of the state of the soul during that terrible conflict which holy men have taught us to believe takes place in the act of death. To our finite conceptions the struggle is ended as soon as life appears to be extinct. Is such the fact? or is the process of dying still going on, as some have supposed, even after the heart has ceased to pulsate?‡ These subtle and

* Art. “Death.” *Cycl. Anat. and Phys.*

† Milton.

‡ “More than a hundred experiments on living animals have satisfied me,” says Richerand, “that the intestines are always the last part in which the traces of life may be discovered. Whatever may be the sort of death by which they are destroyed, peristaltic motions are still continued in this canal, while the heart has already ceased to beat, and the rest of the body is all an inanimate mass.” Dr. Smith observes that the corollary from this position is obviously the propriety of applying stimulants to the intestinal tube, in cases of suspended animation.

mysterious questions are, I fear, beyond the range of the most acute and deeply-thinking philosophers.*

To many minds the subject of death presents great attractions. Its awful sublimity, the mysteries that hang over it, its natural associations with all that is tender and pathetic, invest it with a poetic charm to which it is impossible for a man of taste, intellect, and feeling to be insensible.

“ Thoughts unspeakable
Crowd in my heart to burning, when I hear
Of this almighty death, who is, it seems,
Inevitable.
* * * * *

It hath no shape, but will absorb all things
That bear the form of earth-born being.
I knew not that, yet thought it, since I heard
Of death ; although I know not what it is,
Yet it seems horrible. I have looked out
In the vast desolate night in search of him,
And when I saw gigantic shadows in
The umbrage of the walls of Eden, chequered
By the far-flashing of the cherub's sword,
I watched for what I thought his coming, for
Dark fear rose longing in my heart to know
What 'twas that shook us all—but nothing came ;
And then I turned my weary eyes from off
Our native and forbidden paradise,
Up to the lights above us in the azure,
Which are so beautiful.”†

What more sublime than the transition of the soul from one state of being to another ! What more mysterious than the passage of the disembodied spirit through the valley of the shadow of death ! Who can imagine the feelings of the traveller, or portray to our imaginations the visions of the place ?

Viewing, however, the subject before us in a more practical light, and referring to the conduct of the physician at that solemn crisis, I would suggest whether he may not have occasion to point out the propriety of some member of the family being by the bedside of the patient in his last moments, as the approximation of those nearly related to the dying is supposed, upon good grounds, to comfort and sustain the mind, and smoothe the passage to the tomb, although there is no apparent recognition

* Under the heathen mythology, it was believed that the struggles of death continued till Proserpine had cropped the hair on the crown of the head, as victims were treated at the altar. Virgil has preserved this opinion in the fourth book of the *Æneid*, where he offers so fine a picture of the dying agonies of Dido.

† Byron.

or evidence of consciousness remaining. When Louis XIV. was dying, he turned to his physician, and exclaimed, "It is not so difficult to die as I expected!" Voltaire, in referring to this circumstance, remarked, "All men die with composure and fortitude *who die in company.*" He imagines that the courage of soldiers in the heat of battle is in a great measure owing to the fact of their being surrounded by those who may, in case they should fall, bear testimony to their gallantry and courage. By parity of reasoning, and from the observation of himself and others, he concludes that the actual contact of a relative with the dying man, at the moment of the last struggle, sustains and supports him in the terrible convulsions that ensue, when spirit becomes disembodied from matter.

It is often the painful duty of the physician to intimate to his patient that the last gleam of hope has faded from his mind, and that he must prepare for the painful change which awaits us all. I would impress upon your minds, recognising the powerful influence of depressing mental emotions upon the shattered physical condition, the great importance of not prematurely snatching from under the patient the only prop—frail and fragile as it may be—upon which his and our hopes of recovery rest. To inform a man that he must prepare for death; that his hours are numbered; to bring about his bed the wailing of deep distress, when reasonable expectations exist of his ultimate recovery, would, in certain temperaments, induce the prophetic result.

But an occasion may present itself when it will become our solemn duty to awaken the patient to a sense of his dangerous state and hopeless condition, and to point out to his relatives the necessity of his performing the last sad offices of life. On this subject can I do better than quote the subjoined admirable suggestions?—

"And here you will now forgive me, perhaps, if I presume to state what appears to me to be the conduct proper to be observed by a physician in withholding or making his patient acquainted with his opinions of the probable issue of a malady manifesting mortal symptoms. I own I think it my first duty to protract life by all possible means, and to interpose myself between him and everything that can aggravate his danger; and unless I shall have found him averse from doing what was necessary in aid of my remedies, from a want of a proper sense of his perilous situation,

I forbear to step out of the bounds of my province in order to offer any advice which is not necessary to promote his cure. At the same time, I think it indispensable to let his friends know the danger of his case the instant I discover it. An arrangement of his worldly affairs, in which the comfort or unhappiness of those who are to come after him is involved, may be necessary; and a suggestion of his danger, by which the accomplishment of this object is to be obtained, naturally induces a contemplation of his more important spiritual concerns, a careful review of his past life, and such sincere sorrow and contrition for what he has done amiss, as justifies our humble hope of his pardon and acceptance hereafter. If friends can do their good offices at a proper time, and under the suggestions of a physician, it is far better that they should undertake them than the medical adviser. They do so without destroying his hopes, for the patient will still believe that he has an appeal to his physician beyond their fears; whereas, if the physician lay open his danger to him, however deliberately he may do this, he runs a risk of appearing to pronounce a sentence of condemnation to death, against which there is no appeal, *no hope*; and, *on that account*, what is most awful to think of, perhaps the sick man's repentance may be less available.

"But friends may be absent, and nobody near the patient in his extremity, of sufficient influence or pretension to inform him of his dangerous condition. And surely it is lamentable to think that any human being should leave the world unprepared to meet his Creator and his Judge, 'with all his crimes broad blown!' Rather than so, I have departed from my strict professional duty, and have done that which I would have done to myself, and have apprised my patient of the great change he was about to undergo.

"In short, no rule not to be infringed sometimes can be laid down on this subject. Every case requires its own considerations; but you may be assured that if good sense and good feeling be not wanting, no difficulty can occur which you will not be able to surmount with satisfaction to your patient, his friends, and yourself."*

Apart entirely from the great importance of our having a right appreciation of our position as accountable agents, the cultivation

* Essays and Orations, delivered before the Royal College of Physicians, by Sir H. Hallford, Bart., M.D.

of a simple faith in the principles and truths of our holy and revealed religion, during the hours of serious illness, as well as at the solemn moment of death, has, if judiciously regulated, undoubtedly a valuable therapeutic influence.

The serenity, tranquillity, and resignation of the truly Christian mind, in moments of danger and during attacks of acute disease, will often do more to sustain the *vis vitæ*, allay unnatural excitement, and facilitate recovery, than any physical stimuli we may administer. Lord Bacon suggests to the physician that it is a part of his art to smoothe the passage to the tomb, and to render the transition from life to death easy, placid, and gentle. An occasion may present itself, affording to the physician an opportunity of relieving the mind of the dying of oppressing and distressing thoughts that may be interfering with that composure and calmness so necessary and indispensable at this solemn and awful moment. When Goldsmith was upon his death-bed, the intelligent and sagacious eye of his physician recognised that the poet's mind was evidently under the influence of some concealed painful emotions. "I perceive," said his physician to Goldsmith, "that your mind is ill at ease." The poet readily admitted that such was the fact. He was induced to unburden his thoughts; and impressions which would (in all probability) have rendered his last moments miserable, were at once removed by the judicious advice, promises, and consolations of his kind and benevolent physician.

Dr. Armstrong, who had a keen appreciation of the importance of watching the state of the mind during illness, advised Dr. Boot, a few hours before he died, to be always cheerful in his intercourse with the sick; he assured him that the physician may have the power of taking a load from the heart, and infusing into it hope and consolation. Dr. Nichols says, that whatever a man's distemper was, he would not attend him as a physician if his mind were not at ease, for he believed no medicine would have any influence under these circumstances. He once attended a man in trade, upon whom he found none of the medicine he prescribed have any effect. He asked his wife privately whether her husband had not been exposed to some losses in trade? She said "No." He continued to attend him, but no impression could be made on his malady. At length, the man's wife

told the physician that she had discovered accidentally that her husband's mind was much troubled by his pecuniary difficulties.*

It will be our province, as psychologists, to trace the connexion between a total want of sensibility in regard to those impressions which affect the eternal welfare of man, and certain morbid conditions of the bodily functions which are generally admitted to exercise an influence over the devotional emotions. Whilst expressing my firm belief in the possibility of a direct interposition of Divine agency upon the mind, inducing spiritual changes in the hearts of those happily brought within the sphere of such holy inspirations, I nevertheless consider it my duty to suggest, that as God, in His great wisdom, often accomplishes His wise designs through the instrumentality of secondary physical agents, it is legitimately within our power, *by watching the state of our mental and physical condition, to adapt the mind for the more ready reception and recognition of those truths the right appreciation of which is so essential to the eternal welfare of the human race.* I would speak with great reverence and caution, and with extreme diffidence, upon subjects so solemn and sacred; yet I would ask, can the physician neglect their philosophical consideration? When alluding to this subject, Baxter, who cannot for a moment be supposed to entertain an irreverent thought in connexion with the subject of religion, observes:—"The want of consolation in the soul is often owing to *bodily disease.* It is not more surprising for a conscientious man, under the influence of a morbid melancholy, to doubt and despair, than it is for a sick man to groan, or a child to cry when it is chastised. Without the physician, in these cases, the labour of the divine would be in vain. Fear may silence the groans of the wounded spirit, but you cannot administer comfort. The consciousness of sin, and the apprehension of the wrath of God, are often the results of bodily distemper."† "There are some cases when a man's thoughts are in a manner forced upon him, *from the present temper and indisposition of his body*; so that, so long as that habit of body lasts, he cannot avoid that sort of thoughts. This is the case of some deeply hypochondriac persons, many of whom will be haunted with a set of thoughts and fancies that they can by no means get rid of, though they desire it never so earnestly

* "De Anima Medica."

† "Saints' Rest."

We may properly call these *fancies of their waking dreams*, as their dreams are their sleeping fancies."

"Though we cannot, in many cases, think always of what we would,—nay, though we cannot hinder abundance of thoughts from coming into our minds, *against our will*,—yet it is always in our power to assent to our thoughts, or to deny our consent to them: if we do not consent to them, so soon as we are aware of them, there is no harm done. Should we be haunted with blasphemous thoughts, and cannot get rid of them, we must consider that our thoughts are no further ours than as we choose them; *that all sin lies in the will, and all will implies choice*; that those thoughts, therefore, which are not our choice, which we reject with a settled aversion and abhorrence, will never be placed to our account. So that our thoughts, however indecent or irregular soever they may be, are rather to be considered the infirmities of our corrupt nature, than our sins, properly so called. If we close with any thought that prompts us to evil, so as to be pleased with it, to think of pursuing it till it be brought into action, in that case we can no longer plead our natural corruption; for in that very instant we become actual sinners, or actual transgressors of the law of God. The mind is passive in receiving its notices of things, whether pure or impure; but it is active in its determination whether to harbour or discard them. As far as it is passive, it is certainly innocent; as far as it is active, it is accountable: and it is constantly active when we dwell upon impure thoughts with complacency—when we strengthen ourselves in wickedness by cherishing the remembrance of guilty joys, and laying scenes in our imagination for the entertainment of future pleasures. Here, then, we see in what the government of our thoughts consists: they are not criminal till they have the consent of the will; and the soul can withhold that consent till it has sufficiently considered the whole case." :

"Notwithstanding what I have hitherto said concerning the diligence with which we are to keep our hearts, yet this is always to be remembered, that with our diligence we must be careful to join discretion. My meaning is this: we must have a care not to extend our thoughts immoderately, and more than our tempers will bear, even to the best things. And the way to do that is, not to put them too much or too long upon the stretch at any one time; but to relax them when there is occasion, and to let

them run out and entertain themselves upon anything that comes to hand, so long as it is innocent.”*

Burton frequently adverts to the recurrence of unholy and impure thoughts as a mental symptom of bodily disease, and so formidable a source of anguish as sometimes to occasion suicide.† Archbishop Secker, who was himself originally a physician, when speaking of “sin against the Holy Ghost,” says: “As for what some good people are often terrified about, the wicked imaginations that come into their minds, and expressions that come out of their mouths, at times, almost whether they will or not, in proportion as they are involuntary, they are not criminal in them, *be they ever so bad*. When they apprehend they cannot be pardoned, they entirely mistake their own case, either through ignorance or false opinions, or excessive tenderness of mind; or indeed more commonly by reason of some bodily disease, though perhaps unperceived by themselves, which depresses their spirits and clouds their understanding, and *requires the aid of medicine*.”‡

Emboldened by such theological authorities—writers whose orthodoxy is above all suspicion—I would suggest that the attention of the psychologist should be particularly directed to the physical state of the organic functions of life, when he witnesses instances of an exalted or depressed condition of the religious feelings, different in their character from ordinary and healthy manifestations, and not clearly and distinctly traceable to legitimate influences. I am aware that there is a disposition on the part of those who take an *ultra spiritual* view of the mind’s operations, to repudiate as blasphemy the material theory just enunciated. “What cheer,” says Emerson, “can the religious sentiment yield, when that is suspected to be secretly dependent upon the seasons of the year and the state of the blood?” “I knew,” he continues, “a witty physician, who found theology in the biliary duct, and used to affirm that if there was disease of the liver the man became a Calvinist, and if that organ was sound he became a Unitarian.” In reply to this piece of pleasantry, I would observe that many a man has considered himself spiritually lost whilst under the mental de-

* “New Whole Duty of Man.”

† “Anatomy of Melancholy.”

‡ “Lectures on the Church Catechism.”

pression resulting from long-continued hepatic and gastric derangement; and instances frequently occur of persons imagining themselves to be condemned to everlasting punishment, to be the subjects of demoniacal influence, and to hold personal converse with our Saviour, owing to the existence of visceral disease, or a congested condition of some one of the great vascular or nervous centres. In the former case the mind has been restored to a right and saving appreciation of Divine Mercy, and has been made to rejoice in comfort and hope, as the effect of a course of alterative medicine; and the morbid and unnatural ideas of demoniacal possession, and satanic and Divine presence, have vanished as soon as the bowels and various secretions have been made to act with healthy regularity, and the cupping-glasses have aided us in relieving the oppressed cerebral vessels. "It is probable," says Dr. Cheyne, "that they who have formed a lively conception of the personal appearance of Satan, from prints or paintings, have often had the conception realized in nervous or febrile diseases, or after taking narcotic medicine; and it is but charitable to believe that Popish legends, which describe victories over Satan, by holy enthusiasts, have had their origin in delusions of the senses, rather than that they were pious frauds."—"If it were," says Baxter, "as some fancy, a possession of the devil, it is possible that physic might cast him out. For if you cure melancholy, (black bile,) his bed is taken away, and the advantage gone by which he worketh. Cure the bile, and the choleric operations of the devil will cease: it is by means and humours in us that the devil worketh."

I am acquainted with an excellent Christian lady, who, at the critical period, loses all sense of religious impressions; her language during these attacks of partial derangement is most distressing and painful. I have occasionally to prescribe for a gentleman subject to attacks of sub-acute bronchitis, accompanied with a temporary perversion of the moral sense, owing, it is surmised, to the altered condition in the quality of the blood circulating in the brain. During these paroxysms his mind repudiates all idea of the existence of a God, and of a future state; and yet, when a healthy supply of properly arterialized blood is transmitted to the brain, the patient manifests, both in his conduct and conversation, the character of a true Christian gentleman.

The rationale of epidemic fanaticism is a subject of deep and

important philosophic interest. How often mere exalted physical sensibility has been mistaken for the operation of the Holy Spirit; and illusions of the senses been faithfully and graphically recorded as evidences of Divine or satanic presence. Was not Luther, whilst in confinement, under the influence of temporary insanity? His representations—believed by many to this day in their literal sense—that he had frequent personal contests with the devil, most probably depended upon local cerebral congestion, or morbid state of the retina, and would, in our times, have justified a suspicion of the soundness of his mind. In the early history of the crusaders, and during epochs of religious and political commotion, such as the Reformation, and other social convulsions, it would not be difficult to cite numerous well-marked and unequivocal cases of insanity, which were considered at the time as instances of heroic devotion, political patriotism, and religious enthusiasm. Mr. Dendy has written so ably and lucidly on the subject of apparitions,* that I do not deem it necessary to more than refer to the connexion which we, as psychologists, know so closely exists between what are considered to be supernatural phenomena, and certain derangements of the cerebral circulation, diseases of the heart, and disorders of the alimentary canal and digestive organs. Dr. Ferriar observes: “Instead of regarding these ghost-stories with the horror of the vulgar, or the disdain of the sceptic, *we should examine them accurately, and should ascertain their exact relation to the state of the brain, and of the external senses.* The terrors of nocturnal illusions would then be dissipated, to the infinite relief of many wretched creatures; and the appearance of ghosts would be regarded in its true light, as a symptom of bodily distemper, and of little more consequence than a headache, and rigor attending a common catarrh.”†

I have known cases in which a belief in the appearance of an apparition has ushered in, at an early age, severe brain-disease, and in advanced life has been precursory of paralysis, apoplexy, and insanity. A gentleman, as the effect of an active condition of the cerebral circulation, saw for several nights a ghastly spectre in his bedroom. A week afterwards he had an attack of apoplexy, of which he died.

It is our duty, as psychologists, to trace the relationship between certain palpable deviations from a normal state of thought, feeling.

* “Philosophy of Mystery.” By W. C. Dendy, Esq.

† “Theory of Apparitions.”

and action, often associated apparently with great vigour of understanding, brilliancy of genius, and power of continuous attention to the complicated and active business of life, and those states of the bodily health and physical organization which may originate and stimulate to action such morbid mental phenomena. There is much latent, undetected, and unrecognised insanity in real life : bringing with it a long train of deep and incurable misery. It assumes many aspects : occasionally it exhibits itself in the form of intemperance—an uncontrollable propensity for stimulants clearly having a mental origin—in extreme eccentricity, and in acts of a morbidly impulsive character. Again, it is manifested in brutal and cruel conduct ; in others, it is evidenced either in an unnatural and unreasonable hatred of relatives, a total want of all moral sense, extreme irritability, tendency to crime, acts of viciousness, or in habits of inveterate lying. In fact, its shape is protean ; and although those so unhappily afflicted often pass through life as sane, healthy, and rational persons, in the estimation of the Medico-psychologist they are suffering from disordered understandings, and ought to be brought within the sphere of remedial medicine.

The biography of tyrants, both REGAL and DOMESTIC, is yet to be written ; and it remains for the philosophic historian, capable of appreciating the effects of defective and arrested cerebral organization,—the influence of physical and moral agents ; and of bodily disease upon the character and temperament,—to account psychologically for the actions of men, the records of whose lives form the dark scenes of history, and present to the world a continuous career of morbid selfishness, crime, cupidity, caprice, tyranny, brutality, and vice. We do not possess data to enable us to judge satisfactorily of the mental or physical state of a Nero, a Caligula, or a Tiberius, who, as Tacitus informs us, was designated by his tutor, at the age of twenty, as “*a compound of mud and blood*,” but is it not charitable to suppose they were physically and morally diseased, and of unsound mind, the insanity manifesting itself in conduct, and not in ideas ? Again, can we advance anything, as psychologists, in palliation of the crimes of Catherine de Medici ?—or that would extenuate in the eyes of the world the brutal treatment to which Frederick William of Prussia, father of Frederick the Great, subjected his son ?—or would be an apology for the atrocious tyranny and savage brutality of Judge Jeffreys ?—anything to

excuse the cold, calculating murders of Henry VIII. ?—or the refined crimes of, and thirst for blood exhibited by Robespierre ? —or say a word in extenuation of the unnatural furor with which the poet Savage was hunted to death by his own mother ? Poor Savage ! No sooner was he born than his mother discarded him. After he had discovered the name of his parent, it was his practice to walk in the dark evenings for several hours before the door of his mother's house, in the hope of seeing her as she might come by accident to the window, or cross her apartment with a candle in her hand ; but Dr. Johnson says, " he could neither soften her heart nor open her hand." In attempting to explain the extraordinary hatred exhibited by the mother of Savage towards her only child, and the intense malignity with which she, by the most awful falsehoods, attempted to procure the execution of the unhappy poet, Dr. Johnson observes, that the " most execrable crimes are sometimes committed without apparent temptation." When alluding to his own miserable fate, Savage feelingly exclaims,—

" No mother's care
Shielded my infant innocence with prayer ;
No father's guardian hand my youth maintained,
Called forth my virtues, or from vice restrained."

May not all these monstrous departures from ordinary and healthy modes of thought, impulse, and action, constitute evidence, not only of depravity and vice in their ordinary signification, but of *undetected, unperceived, unrecognised mental disease, in all probability arising from cerebral irritation or physical ill-health* ? Catherine de Medici's disposition did not show itself until after the death of her husband. I am not in a position to say how much of her conduct was to be attributed to the shock of his dissolution : but it is said she suffered from determination of blood to the head, so severe in its character as to require occasional bleeding for its relief. Frederick William of Prussia was a debauchee and a drunkard. He conceived, without any reason, an inveterate hostility to his eldest sister, and to the prince, his son, afterwards Frederick the Great. He compelled them to eat the most unwholesome, disgusting, and nauseous articles of diet. He was in the habit of spitting in their food, and behaving towards his son with great ferocity. King Frederick suffered from severe attacks of hypochondriasis, and great mental depression, and it was during one of these paroxysms that he attempted suicide. Who can entertain a doubt of his insanity, or of the good that would

have resulted had his brutality and cruelty been considered symptoms of some affection of the brain, and he had been treated accordingly? Robespierre, after his death, was found to have extensive visceral disease; and it is notorious he suffered much from this affection during life. It is recorded that he rolled on the ground for hours in acute pain.

Judge Jeffreys, it is said, was "tortured by a cruel internal malady, which had been aggravated by intemperance."* In the celebrated Western, or "Bloody" Assizes, this monster is said to have *hanged* 320 and *transported* 855 persons for "the most part of blameless life and of high religious profession!" Previously to his starting for the circuit Jeffreys' health and spirits had given way. "He had been deeply mortified by the coldness of the king and by the insolence of the chief justice, and could find little consolation in looking back on a life, not, indeed, blackened by an atrocious crime, but sullied by cowardice, selfishness, and servility." During the celebrated trial of Lady Alice Lisle, Jeffreys is said to "have stormed, cursed, and sworn in language which no well-bred man would have used at a race or cock-fight." Addressing himself to one of the witnesses who gave evidence in favour of Lady Alice, he exclaimed, with an oath, "Was there ever such a villain on the face of the earth? Dost thou believe that there is a God? Dost thou believe in hell-fire? A Turk is a saint to such a fellow as this! Oh, blessed Jesus! What a generation of vipers we live among! Was there ever such an impudent rascal? Hold the candle to him, that I may see his brazen face!" As Jeffreys proceeded in his bloody business, his "*spirits rose higher and higher as the work went on. He laughed, shouted, joked, and swore in such a way, that many thought him drunk from morning to night.*"†

I again ask, if the psychological physician is not best fitted, by thought, reflection, and education, to investigate, and elucidate satisfactorily, these interesting morbid psychical phenomena, and to suggest the possibility of effecting important changes in the *moral* and intellectual condition, by bringing within the sphere of medical treatment the *physical state* giving rise to these obvious departures from sound and normal manifestations of the affections and propensities? *Many a suicide would be prevented, and murderous and criminal impulse destroyed, if an active*

* Macaulay's "History of England," vol. i. p. 67.

† Macaulay, p. 600.

cathartic could be exhibited, or the cerebral circulation relieved, and rendered less active by means of local depletion. There are crimes for which men have been hanged, which might have been prevented by physical treatment. Damien persisted in declaring to the last that had he been bled in the morning, as he wished and requested, he never would have attempted the assassination of Louis XV. It is recorded of Caligula, that his reign commenced with mildness, but that the end of the first year, *after a violent attack of bodily illness*, he commenced his career of cruelty, violence, and crime, slaughtering the noblest men of Rome, and hunting the spectators of a public show into the waters of the Tiber!

Is it not possible, by a course of medicine and a system of dietetics, to modify the diathesis, both mental and physical? Dr. Arbuthnot says he cured an irascible diathesis by enforcing a milk and vegetable diet, and Dr. Rush relates a case of a man who was subject to severe paroxysms of anger, who was cured by the application of leeches to the head.* Let it not be thought for a moment that I suppose the skill of the *physician* can supersede the aid of the *divine*; but "*the service of God is a REASONABLE service*;" and divines themselves, eminent for piety and learning, are not unfrequently subjected to medical treatment, not only to arrest aberrations of the intellect, but to cure perversion of the moral sentiments.

In referring to the possibility of the hallucinations of Luther being the result of physical causes, Coleridge observes that his unremitting activity, labour, and sedentary mode of life, during his confinement in the Wartzburg, had undermined his former usually strong health. Luther suffered from many of the most distressing effects of indigestion, so much so that his friend, Melancthon, urged him to consult the physicians of Erfurth. He did so, and for a time regained his health; he soon, however, relaxed into his former habit. Coleridge says it was evident

* An English traveller calling on Voltaire, at Ferney, found him desponding, grumbling, and dissatisfied with all mankind. The conversation soon fell upon the miseries of life, and the Frenchman's *ennui* and the Englishman's spleen exalting the mutual discontent of both parties, they ended by deciding that existence was too grievous a burden to be borne any longer, and agreed to commit suicide together on the following morning. The Englishman, punctual to his engagement, arrived at the appointed hour, provided with the means of destruction; but the volatile Frenchman was no longer in the same miserable, suicidal mood, for on the other proposing to proceed immediately to the execution of their project, Voltaire laughingly replied, "*Pardonnez-moi, Monsieur, mais mon lavement a très bien opéré ce matin, et cela a changé toutes idées-là.*"

from his letters that Luther suffered from great irritability of the nervous system, the common effect of deranged digestion in men of sedentary habits, who are, at the same time, intense thinkers; and this irritability, added to a revivification of the impressions made upon him in early life, and fostered by the theological system of his manhood, is abundantly sufficient to explain all his apparitions and all his nightly combats with evil spirits. "I see nothing," says Coleridge, "improbable that in one of those unconscious half sleeps, or rather those rapid alternations of the sleeping with the half-waking state, which is the '*true witching time*,'

'The season

Wherein the spirits hold their wont to talk.'

the fruitful *matrix* of ghosts,—that in one of those moments of slumber, into which the suspension of all thought, in the perplexity of deep thinking, so often passes, Luther should have had a full view of the room in which he was sitting, of his writing-table, and, at the same time, a brain image of the devil, vivid enough to have acquired an apparent *outness*, and a distance regulated by the proportion of its distinctness to that of the objects really impressed upon the outward senses."*

No one can read the interesting account of the unhappy controversy between Hume and Rousseau, prefixed to the first volume of the historian's *Philosophical Essays*, without having the conviction forced upon the mind, that Rousseau must have suffered, at the time, from temporary insanity. "The strange influence of his bodily temperament on his understanding; his constitutional melancholy, pampered into a morbid excess by solitude; his wild dreams of suspicion; his hypochondriacal fancies of hosts of conspirators, all leagued against him and his cause, and headed by some arch-enemy, to whose machinations he attributed every trifling mishap," are referred to as indications of an abnormal state of mind, not at the period recognised, or urged as some excuse for conduct which set the author of *Emelius* against all the world, and all the world against him. The persecution which Rousseau appeared to court, his affectation of singularity, his determination to live in a world of his own creation, and to have no sympathy or thought in common with his fellow-men,—all indicate a constitution of mind, if not actually diseased, at least not remotely removed from that condi-

* "The Friend," p. 238.

tion. Such, it would appear, is destined to be the unhappy fate of all who, to gratify a morbid singularity, resolutely oppose their own crude notions to the calm, deliberate, and healthy judgment of the rest of the world. In attempting a philosophical explanation of these psychical phenomena, Coleridge observes: "To know that we are in sympathy with others, moderates our feelings, as well as strengthens our convictions; and for the mind which opposes itself to the faith of the multitude, it is more especially desirable that there should exist an object *out of itself*, on which it may fix its attention, and thus balance its own energies."*

There are other important subjects that come legitimately and almost exclusively within the range of the speculations of the psychological physician, to which I can only cursorily refer. It is his duty to investigate the moral as well as physical effects of climate, and of the different systems of dietetics, upon the psychical character of nations; the laws relating to the influence of the mind of both parents on the offspring; the transmission of hereditary diseases and mental qualities; the nature of the education best adapted to strengthen the mind and avert the development of insanity; the influence of different kinds of amusements upon the public morals; the effect of the prevailing literature upon the formation of character and the development of the human mind; the effect of different kinds of pursuits upon the mind and character; and the *modus operandi* of music as a remedial agent. The interesting and important points involved in the investigation of the subjects of crime, penal legislation, capital punishment, trance, somnambulism, dreaming, &c., are only to be solved by the philosopher who, to an enlarged and cultivated understanding, unites a knowledge of the higher departments of physiology, joined to an acquaintance with the science of mental philosophy. Need I advance another argument to demonstrate the imperative necessity of establishing, in connexion with our national universities, a professorship of medical psychology, for the special investigation of these essentially necessary sections of philosophical inquiry, so important to the PHYSICIAN, the DIVINE, the LEGISLATOR, the JURIST, the EDUCATOR OF YOUTH, and to all who feel, as all the educated classes should feel, an interest in the intellectual and moral progress, the temporal and eternal welfare, of man?

* "The Friend," p. 224.

Finally, I would observe, that of all the subjects that can occupy the attention of the philosophic physician, none equals in importance or in grandeur those which I have had the honour of recommending to your special attention. What can compare in dignity, in sublimity, in comprehensiveness, or in the lofty aim of its disquisitions, to the study of the nature and operation of that spiritual essence, upon the right knowledge and cultivation of which depends our happiness, both in time and in eternity? As the mind advances in a knowledge of its own phenomena, the intellect expands, new sources of delight open to us, and the pleasure we experience in the pursuit of these exalted speculations impresses forcibly upon the mind itself conclusive evidence of its own DIVINITY. He who has habituated himself to trace out the numerous applications of mental philosophy to the important subjects of education, morals, and legislation; to analyse the nature of thought, the laws regulating the association of our ideas, the springs of action, the origin of our happiness, the laws of moral science, the nature of the passions, the formation of character, the foundation of our hopes, and the influence of our emotions,—will appreciate the value of this branch of science. The physician will be conscious, as he advances in a knowledge of the constitution of the mind, that his love of truth is growing strong; and whilst, in the spirit of true humility, he acknowledges the limited nature of his intellectual powers, he will, whilst contemplating their grandeur and importance, recognise the GOODNESS AND MAJESTY OF GOD.

In glancing retrospectively at the preceding portion of this lecture, I feel oppressed by a consciousness of the imperfect and inadequate manner in which I have sketched the exalted spiritual functions of the physician. Have I not reason to blame myself for attempting to grasp a subject so great and sublime? And have not those whom I have the honour of addressing a right to censure me for my presumption in selecting for illustration a theme requiring for its successful elucidation and expansion an amount of knowledge of the higher departments of philosophy, an originality of conception, and power of illustration, to which I have no pretension? Our position as medical philosophers, occupied in the investigation of the phenomena of life, of mind, and of disease, entails upon us anxious, solemn, and responsible duties. In the hour of pain, when the spirit is humbled by suffering—in the day of distress—in the solemn moment of dis-

solution,—it is our high and noble privilege, like guardian angels, to hover about the couch of the sick and the dying. We enter the chamber of the man writhing with agony, bereft, perhaps, of that which alone made existence pleasurable, the right exercise of the mental powers, and loud and affectionate demands are made upon our sagacity and skill. Life—the silken thread, the silver cord of life—depends upon our rapid appreciation of the phenomena of disease, and ready administration of remedial agents for their relief and cure. Our profession is a noble one—a most dignified, exalted, and honourable calling. “The skill of the physician puts in requisition the highest faculties of the human intellect, as its administration calls forth the tenderest sympathies of the human heart. The able and kind physician is a human benefactor. He garners up the treasures of learning and experience, that he may dispense them again to his suffering brethren. He comes with his timely succour, cheering both body and spirit with the single boon of health. He raises the sick man from his couch of pain, and sends him forth, elate and vigorous, for fresh enjoyment. He restores the ailing, and rejoices their despondent friends. He gives new life to the sick, and revives the hopes of those who depend on the sick man’s recovery for subsistence.”*

While feeling that the best of our works are imperfect, and that we must rely for our future happiness upon the great mercy of God, and not upon our own merits, I cannot be forgetful how great is our responsibility for the right use of our talents, and the faithful discharge of our solemn and anxious duties; and I would therefore venture, with all deference and respect, to address to each of my professional brethren the admonition of one of America’s most gifted poets :†

“So live, that when thy summons comes to join
The innumerable caravan, that moves
To that mysterious realm, where each shall take
His chamber in the silent halls of Death,
Thou go not, like a quarry-slave at night,
Scourged to his dungeon; but, sustained and soothed
By an unfaltering trust, approach thy grave
LIKE ONE WHO WRAPS THE DRAPERY OF HIS COUCH
ABOUT HIM, AND LIES DOWN TO PLEASANT DREAMS.”

* “The Girlhood of Shakspeare’s Heroines,” chapter—The Vocation of the Physician. By Mrs. Mary Cowden Clarke.

† William C. Bryant.

DR. CHARLESWORTH AND MR. GARDINER HILL; OR THE NON-RESTRAINT SYSTEM OF TREATMENT IN LUNACY.

It is of vital importance to the best interests of society that questions of priority in the discovery of great truths should be decided with impartiality and justice. A question of priority has been lately contested with a warmth not very unusual in matters of this kind. Mr. Gardiner Hill (formerly house surgeon to the Lincoln Asylum, under the late Dr. Charlesworth, the visiting physician to that institution) industriously advertises himself as the "*originator of the non-restraint system*" in the treatment of insanity. Mr. Hill, as we understand his position, prefers this claim to the extent of virtually excluding all share in this "discovery" to Dr. Charlesworth. How does the matter stand? In the first place, can we call the "Non-Restraint" system, as expounded by Mr. Hill, a "discovery"? It may fairly be questioned how far a system of treatment which consists to some extent in the substitution of manual force for instrumental coercion, is entitled to this high-sounding appellation. In the second place, is it enough to have *enunciated*, in an anticipative sense, the proposition, "that it may be possible to conduct an institution for the insane without having recourse to any instruments of restraint whatever,"—is it enough, we say, to hazard this conjecture, in order to establish a claim to a "discovery" of a principle hitherto unknown? In the third place, did Mr. Hill stamp this presumed discovery with the character of a lasting truth, by carrying his anticipative speculation into successful practice? We are compelled to answer that he failed to accomplish this upon his own showing—and we cannot admit that any explanation of necessity, however plausible, can in any way destroy the fact, or weaken the inference from it.

That Mr. Hill generally evinced, throughout his official career, an earnest endeavour to extend the application of the humane principle of treatment for which the Lincoln Asylum had for many years previously to his time been renowned, we willingly admit. That the authorities, and no one more heartily and unreservedly than Dr. Charlesworth himself, repeatedly recorded their approbation of his zeal, is also true. It would be unjust to deny to Mr. Hill this merit. But that he made any "discovery" in the matter is most absurd. That he initiated, either in theory or in practice, the system of non-restraint, is also opposed to historic evidence. To assert that Dr. Charlesworth ever transferred from himself to Mr. Hill the honour of this said "discovery," is also untrue. None of the expressions of Dr. Charlesworth, so much relied upon by Mr. Hill, will bear this forced construction. It is, on the contrary, within our own knowledge, that Dr. Charlesworth, who was ever ready, in the most generous manner, to extol Mr. Hill's merits, expressly and emphatically denied that he was entitled to the particular honour which he now claims. We also know that those physicians whose labours in this department of science entitle their opinions to respect, entertain the same view upon the subject. In justice to the

honoured name of Dr. Charlesworth, we cannot help expressing our conviction that these gentlemen are bound to speak out before the public that which they have not hesitated to say in private.*

But apart entirely from these considerations we ask, in sober seriousness, whether on other grounds Mr. Hill has any right to put himself forward as the "discoverer," or "originator" of the "non-restraint system of treating the insane"? The great "discoverer," the illustrious "originator," was unquestionably the immortal PINEL; but this FACT appears to be entirely ignored and lost sight of by those who have busied themselves in this noisy controversy. Mr. Gardiner Hill may have *adopted and carried out in this country a principle of treatment* developed by this celebrated physician;† but he has no more claim to the designation of "originator" or "discoverer," *quoad* the abolition of restraint, than a man has to call himself the "originator" of vaccination, simply because he enforces the importance of Jenner's discovery, as a protection against small-pox! Does not Mr. Hill expose himself to the charge of arrogance and presumption by designating himself, as he ostentatiously and absurdly does in all his advertisements, as the *author (?) and originator of the non-restraint system of treatment in lunacy*."‡ We never read his often-repeated advertisements without a feeling of pain and humiliation. Let the honoured mantle fall upon the right shoulders; let the revered name of Pinel have all the credit of the "discovery" or "authorship," as Mr. Hill ridiculously terms it; but, for God's sake, let it not be said that any *Englishman* endeavoured by stealth to filch from the immortal Frenchman the honour to which he is so justly entitled, and which the whole civilized world awards to him, for first recognising the important principle that it is possible in the treatment of the insane to dispense (in a great measure) with the use of mechanical restraint! If Mr. Hill asserts that Pinel only took the *initiative*—the first step in the matter, and that it remained for him (Mr. Hill) to *mature* the discovery, and to establish that it is possible to treat *all* cases of insanity without mechanical restraint, then we understand his position and can appreciate the validity of his claim to the title of "originator," "author," and "discoverer." If we are right in our estimate of Mr. Hill's much-

* The question has further been put in the clearest light in an able and faithful summary of the history of the Lincoln asylum in "The Lancet." The conclusion from that summary is irresistible.

† It is a curious fact, and one not generally known, that the idea of carrying out a more humane system of treating the insane originated with two men whose names are seldom mentioned in connexion with this subject. We refer to *Tenon* and *Rouchefoucauld*. But this fact does not detract from the great credit due to *Pinel* for his heroic exertions at the Bicêtre, where the experiment was first tried. The subjoined passage refers to the fact:—"Enfin, en 1768. . . . Tenon publia un mémoire remarquable, dans lequel se trouvent indiquées les premières notions d'un régime doux et humain pour les aliénés. Un citoyen, La Rouchefoucauld, en comprit toute la portée, et joignit plus tard ses efforts aux siens, en faisant en 1791, à l'assemblée constituante, plusieurs rapports, qui dévoilaient l'état misérable dans lequel languissaient les aliénés. C'était là sans doute la douleur d'une belle âme et de nobles efforts auxquels il est juste de renvoyer la cause première des améliorations que Pinel put l'exécuter l'année suivante à Bicêtre."—Scipion Pinel, "*Traité complet du Régime Sanitaire des Aliénés*," 1836. Pp. 55, 56.

‡ *Vide* the Medical Directories.

vaunted "discovery," then we will only now say, that if it be his deliberately formed opinion that no case of acute insanity can possibly occur in which the application of restraint would be justifiable—if such be his dictum, he will find himself opposed to the united experience of all the practical physicians of England, France, Germany, and America.

We have ourselves heard Dr. Conolly (who has always been deemed in this country the leading advocate of the "non-restraint" system of treating the insane) declare, in a court of law, that "mechanical restraint" could not invariably be dispensed with; that cases will present themselves in which it may be necessary to have recourse to it.* We may, in a few words, take our leave of this disagreeable subject. We have stated that all the honour of this "discovery" is, beyond all question, due to Pinel. Nor can any one of reflection and experience admit the possibility of one man having conceived the splendid project of working such a mighty revolution against the tyranny of opinion and the inertia of custom, and of carrying out this work to practical perfection in the course of a few years. More than half a century has expired since the first step was taken by Pinel: and the gigantic labour has not yet reached its consummation. Many minds have been earnestly striving to forward the good work. Foremost amongst these, in this country, must ever stand the name of Charlesworth. For thirty-five years he never wearied in the task. If to the Lincoln system is due the high honour of having shown a bright example of what may be done in the abolition of barbarous instruments, that honour it owes to Dr. Charlesworth. To render this abolition feasible, how many reforms were necessary! The whole physical and moral aspect of the scene had to be changed. This was a work of time—of devoted patience—of never-failing courage and perseverance. This was the work of Dr. Charlesworth. Let the applause of his fellow-men—the only reward he can now have—be accorded to him.

If ever the motto of Lord Somers, "*Prodesse quàm conspici*," could be justly assumed by any other man, that man was the late Dr. Charlesworth. We hope it may not be interpreted as evidence of an unkind feeling towards Mr. Hill—a feeling we altogether disclaim—if we invite his attention to this admirable maxim. It is doubtful whether any man ever made good a claim to priority by blazoning his pretensions before the world in the shape of advertisements. Such a course of proceeding will hardly promote his cause amongst men of science and reflection, and is not altogether free from injurious imputations.

If Mr. Hill be the "author and originator of the non-restraint system of treatment in lunacy"—if he really did make this great discovery—then we ask, is it professional or even decent for him to parade this fact in the advertisements that announce his being the proprietor of a private asylum? If he be the "coming man," the psychological star "looming in the future," the world will not be long in recognising his merits, and thus release this gentleman from the fatigue and inconvenience necessarily consequent upon his being always obliged to blow his own trumpet!

* The trial of "*Hill v. Philp*," Court of Queen's Bench.

STATISTICS OF INSANITY.

BY SIR ALEXANDER MORRISON, M.D., PHYSICIAN TO THE SURREY
COUNTY LUNATIC ASYLUM, ETC.

IN a Paper lately laid before the Society for Improving the Condition of the Insane, established in 1842, by the *late* Earl of Shaftesbury, the following highly gratifying statement is given by Sir Alexander Morrison, of the result of treatment in the Public Establishments of which he has been Physician during the last thirty years:—

The admissions amounted to ...	6779	
Of whom were removed by friends or others during treatment	454	6779
Remaining in the establishments	1587	
Leaving to be accounted for ...	4738	6779
Of whom were discharged	Unreured	806
	Died.....	1440
	Recovered ...	2492

Of the 806 unreured, 173 were either paralytic, epileptic, or idiotic.

The causes of the disorder assigned in 1428 of the cases recovered were as under:—

Hereditary predisposition existed in	386	Anxiety, vexation	43
Intemperance.....	181	Terror.....	39
Pregnancy, child-bearing, abortion, lactation, &c.....	172	Blows on the head, falls	23
Disappointments, reverses, embarrassments, losses, or privations	116	Epilepsy.....	23
Religious excitement	76	Paralysis	8
Grief	62	Causes of more rare occurrence	219
Disappointed affection	50	Of the remaining cases for which no cause was assigned, the disorder had previously occurred in 270.	

The causes of death in 1431 cases were as under:—

Paralysis (in general the cause of the disorder intemperance) ...	284	Abscesses and ulcers.....	25
Exhaustion (chiefly after great cerebral excitement)	196	Cerebral disease.....	20
Pulmonary consumption	164	Erysipelas	18
Epilepsy.....	135	Disease of the heart or great vessels	18
Diarrhea	126	Asiatic cholera.....	18
Apoplexy	100	General debility.....	16
Decay of nature—old age.....	52	Dysentery, ulcerated intestines...	13
Convulsions	29	Suicide	13
Diseased lungs	29	Tubercles, marasmus, atrophy.....	11
Fever	27	Cancer	10
Hydrothorax	25	Bronchitis	10
		Asphyxia	9

Dropsy	8	Diseased Stomach	2
Pneumonia	7	Lumbar abscess	2
Asthma	7	Hæmorrhoidal discharge	2
Enteritis	6	Chorea	2
Gangrene	6	Ruptured liver.....	1
Wounds, falls	5	Ruptured spleen	1
Cynanche	5	Hernia	1
Pleuritis	4	Hemiplegia	1
Diseased liver, bilious cholera ...	4	Delirium tremens	1
Diseased bladder, cystitis, ischuriæ	4	Concussion	1
Diseased ovaria	4	Spinal disease	1
Peritonitis	3	Serofula	1
Influenza	3	Burn.....	1

UPON THE MORBID DESIRE TO KILL.

BY DON RAIMUNDO D. Y. CORREA.

[WE select the following for several reasons—because it is by a Spaniard, and because it seems to us as bringing prominently forward several points in aid of the settlement (if ever it can be settled) of this question. Witness a late case, where the jury acquitted a seduced female of the crime of murder, on the score of insanity, and the next moment the judge gave her a free discharge, because he could see no proof of insanity. The article itself purports to be taken from the *Gac. De Madrid*, and may be found in the *Medical Times and Gazette* of January 29th, 1853, and we can hardly gather from it what portion of it belongs to the author or to the translator.—*American Journal of Insanity for Oct., 1853.*]

The author commences with a eulogy on Esquirol's work on Homicidal Monomania, 1837, and quotes examples from Pinel, Marc, Gall, and Mende. These show the existence of a partial delirium, whether in the form of a fixed idea or an excited sensibility, extravagance in the passions, or error in judgment. In every instance there has been disturbance of the mind, and hence the words addressed by an advocate to Dr. Marc, upon the occasion of a trial of simple barbarity. "If monomania be a disease, its cure is upon the scaffold." The following bit of legal bloodthirstiness also merits being handed to posterity: "Your so-called homicidal monomania is an hypothesis, a modern and convenient invention to shield the guilty, and to withdraw them from the power of the law."

The author proceeds to say, that from the works of Magendie and other physiologists, he can prove that there are certain powers in man, which drive him in a definite direction, without his possessing a will sufficiently strong to offer opposition. These powers, which can be reduced to four, reside in the corpora striata, the cerebellum, the crura cerebri, and the medulla oblongata. Injuries to these parts in animals, cause different involuntary movements, and the author concludes therefrom that there are in man different impulses stronger than the will. Governed by these impulses, the homicidal maniac commits his crime.

A man who commits murder upon a false idea, with powerful impulse, should be considered as suffering from disease in the same part of the brain. Now we cannot see the application of Magendie or Flourens' experiments in the elucidation of psychical disturbance, nor comprehend why, upon division of the *crura cerebri*, the injured and dizzy animal rolls over and over. We have before complained with justice of the gross ignorance of morbid anatomy displayed by the generality of "mental physicians" in all countries, and we think it hard to refute statements made upon no foundation whatever. The examination of the bodies of criminal lunatics does not confirm in any one point the loose assertions of Dr. Raimundo. Neither the *corpora striata* nor the *crura cerebri* are often found in an abnormal condition; the cerebellum is for the most part natural in structure; the medulla oblongata unaltered, except that the membranes covering it become thickened, when other parts of the encephalic coverings have undergone a similar change. We have no ground whatever for asserting that these parts are essentially the seat of morbid actions during life. The cause of insanity is to be sought for in a source deeper than that supposed by those philosophers of a somewhat materialistic school. The author endeavours for judicial purposes to found a differential diagnosis between the maniac and the responsible culprit, both of whom have committed murder.

HOMICIDAL MONOMANIA.

The person is one of weak constitution, of nervous excitable temperament, irreplicable character, working in business for the immediate necessities of life.

The monomaniac is alone.

The maniac kills without interest or passion, without motive, making that man an offering who may be unfortunate enough to meet him.

The maniac disdains to fly, and often gives himself up to justice; he often details the particulars of his act, and seeks punishment more than pardon.

CRIMINAL MURDER.

The criminals are mostly persons of strong constitution, sanguineous or choleric temperament, bad education, given to idle courses, and occupied in immoral pursuits.

The criminal is rarely alone; has usually accomplices to share the booty.

The criminal has a motive; has some passion to gratify, and selects his object accordingly.

The criminal withdraws from observation; tries to mislead the judge; to cast suspicion on others, and to do his best to avoid punishment.

We doubt if these aphorisms will stand their ground as unerring tests in this difficult question. The records of the criminal department of Bethlem Hospital would point to many an inmate imprisoned for murder, whose constitution was good and frame powerful and muscular. Many a criminal has had sufficient nerve to take life alone, unassisted by others; even the last who forfeited his life in the metropolis fell under this class. Should we be justified in asserting that he was mad, because he was *alone* in his wife's chamber when he cut her throat?

Again, the maniac mostly takes life, not by chance or hazard, but in obedience to a fixed, though erroneous idea, sometimes in sudden passion. Who can at all times either discover or appreciate motives?

Jealousy, hatred, or revenge, carefully guarded from public notice, would, but for the Law, impel many a ruffian to gratify his passion at the cost of another's life.

The maniac does not always disdain to fly, and can even argue cleverly in his own defence. But what can be said of that class of offenders whose lowly-organised and ill-directed minds are equally under the influence of both fear and evil passions? Place them under restraint, they behave respectfully and with decency, give them liberty and passion soon regains the mastery. Can any aphorisms comprehend the anomalies of this class? We believe not. Each case must be determined by circumstances elicited at the trial, and by the opinions of those in whom the responsibility of the judgment rests.

Miscellaneous Notices.

Six Lectures on Materia Medica, and its relations to the Animal Economy. Delivered before the Royal College of Physicians in 1853. By JOHN SPURGIN, M.D., F.R.C.P.S. Churchill. 1853.

AMONG the able works that have recently issued from the English press on the subject of *Materia Medica*, there is, to our apprehension, no one to equal in importance the volume before us. Dr. Spurgin has evidently devoted much time and labour to the composition of these lectures, and the result is, that he has produced one of the most philosophical essays on the subject of *Materia Medica* existing in the English language. We regret that our want of space prevents our placing before our readers an analysis of the volume. We would particularly direct the attention of our readers to Dr. Spurgin's views respecting the *modus operandi* of various medicinal agents of known efficacy, and to the chapter appropriated to the investigation of the microscopic character of the blood. The work reflects great credit upon its learned author, and it should find a place in the library of every medical man anxious to keep pace with the progress of medical science.

Clinical Lectures on Pulmonary Consumption. By THEOPHILUS THOMPSON, M.D., F.R.S., Physician to the Hospital for Consumption, &c. &c. London: J. Churchill. 1854.

It is refreshing to take up a volume like the one before us, after perusing the many *ad captandum* works that are yearly published in this country on the subject of consumption. The author of this work has for many years, in fact since its foundation, taken an active part in the establishment of the Brompton Consumptive Hospital. Prior to the erection of this institution, Dr. Thompson had for many years devoted much time to the investigation of pulmonary affections, and the volume now under review may be considered a resumé of his practical knowledge of the treatment of this class of affections. There are many points of psychological interest in Dr. Thompson's work which we had marked for quotation. We refer particularly to his observations on the "Mental Condition of the Dying," to the chapter on "Hysterical Conditions Simulating Consumption," and "On the Influence of Mental Depression as the cause of Phthisis." Whilst directing the attention of the psychological physician especially to these portions of Dr. Thompson's volume, we would,

at the same time, observe that the whole work should be carefully studied by all medical men who take an interest in the advancement of our knowledge of the treatment of this dire disease. Dr. Thompson writes like a man who has derived his knowledge of this class of affections at the bed-side of the patient. The work is replete with sound, sensible, practical remarks on the nature and treatment of consumption, and reflects great credit upon the industry, talent, observation, and sagacity of its learned, amiable, and intelligent author. In the next number of our Journal, we hope to place before our readers those parts of Dr. Thompson's volume that relate to psychological phenomena.

Hufeland's Art of Prolonging Life. Edited by ERASMUS WILSON, F.R.S.

MR. ERASMUS WILSON is entitled to the thanks of the public and profession for this reprint of a work of known ability and reputation.

On Lithotomy and Lithotomy. By WILLIAM COULSON, Esq., Surgeon to St. Mary's Hospital. 1 Vol., 8vo. London: Churchill. 1853.

THIS volume fully sustains the high surgical character and reputation of its distinguished author. It should be in the library of every practical surgeon.

Turkey and the Turks. By the Rev. ARCHIBALD BOYD, A.M., Incumbent of Christ Church, Cheltenham. 1853.

THIS is a lecture delivered to the members of the Church of England Reading Association, and is published at their request, and for the benefit of the Association. We have been much delighted with this charming and intellectual lecture. It is a detailed narrative of a summer tour made this year, 1853, by the author in the East. Mr. Boyd appears to have visited all the points of interest associated with the present unhappy struggle going on in that portion of the globe. His descriptions of the scenery, people, and towns of the East are faithful and graphic; but not more so than we should have expected from the well-known eloquence and literary and classical ability of its accomplished author.

Highley's Library of Science and Art. Vol. 1. *The Microscope in its Special Application to Vegetable Anatomy and Physiology.* Highley, Fleet-street. 1853.

MR. HIGHLEY is entitled to the commendation of the scientific world for the publication of this valuable series of useful and philosophical works. The volume before us, on the "Microscope," is written with great care. The author is evidently practically acquainted with his subject, and writes with the skill of a practised hand. In these days of agricultural and botanical progress, this volume should be carefully studied by all interested in such scientific inquiries.

APPOINTMENTS.

William P. Kirkman, Esq., of the Suffolk County Lunatic Asylum, has been appointed Assistant Medical Officer to the Devon County Asylum, in the room of Dr. Manly, who resigned at Christmas.

Theodore S. G. Boisragon, M.D., Physician to the Cornwall County Lunatic Asylum.

THE JOURNAL
OF
PSYCHOLOGICAL MEDICINE
AND
MENTAL PATHOLOGY.

APRIL 1, 1854.

ART. I.—ON SOME OF THE LATENT CAUSES OF
INSANITY.*

THE entire universe, according to transcendental speculations, is a unity in which all the parts are related and mutually dependent. A remark of Feuchtesleben' may be quoted as an illustration of one department of this mutual dependence: "Could we penetrate into the secret foundations of human events, we should frequently find the misfortunes of one man caused by the intestines of another, whom the former endeavoured to inspire with sympathy in his fate at a moment when the frame of mind of the latter was affected by impeded secretion. An hour later and his fortune would have been made." But his fortune not being made—what then? His future course might be like that of Hamlet—

“ ——— and he, repulsed,
Fell into sadness, then into a fast,
Thence to a watch, thence into a weakness,
Thence to a lightness; and by this declension
Into the madness wherein now he raves.”

And thus through events, in a direct series, from the impeded intestinal action of one man we pursue another to an asylum.

We propose to trace the origin and progress of some of these "sympathies" between mind and matter, and man and man, and investigate their relations to insanity; but the sympathies we shall

* *Leçons Cliniques de Médecine Mentale*, par M. Fahet, Paris, 1854.

investigate will not be so obvious and potent as the preceding. We shall endeavour to get below the surface, and detect some of those with more hidden springs; or, disentangling the chaos of facts which lie to our hands, try to catch hold of a link "of that electric chain with which we are darkly bound."

In whatever way or from whatever point we view the reciprocal influence of body and mind, and of organisms on organisms, we are finally brought to the physiology and pathology of the nervous system. Analyzing the phenomena as they present themselves in man in relation to that system, we are as inevitably led to the cerebrum as the instrument of the mind, and the medium of communication between it and matter. Struggle as we will, to free us from the Material which clothes the Immaterial, we always find ourselves at the same point, and cannot help but acknowledge how inextricably bound up are all our mental operations with that wonderfully constructed but most perishable apparatus. It is true that, in the pride of intellect, philosophers have despised the teachings of physiology and medicine, or, in the vanity of ignorance, have wholly rejected them; it is equally true, too, that the moralist has vainly denied to the material organism all control over man's volitions; it is equally true that the legislator and the judge have contemned that—to them—maudlin doctrine, which teaches that man is irresponsible for his acts, on the ground of uncontrollable automatic operation of the material instrument, if so be that he knows and is conscious that his acts are evil; it is equally true that the untaught man of action has worked in utter ignorance that he used an instrument at all. But the practical experience of the psychiatrist is, nevertheless, opposed to the conclusion of the philosopher, the moralist, the legislator, the judge, and the untaught man of action. That experience is worth folios of hypotheses, for it teaches us the humiliating truth, how utterly dependent are the highest flights of the imagination, and the deepest conclusions of the intellect, on the working of the material instrument, and on its right relations to external agencies.

"Man is but man, inconstant still and various;
There's no to-morrow in him like to-day;
Perhaps the atoms whirling in his brain
Make him think honestly this present hour;
The next a swarm of base ungrateful thoughts
May mount aloft."

Before particularizing the sympathetic influences we propose to discuss, it will be well to indicate in outline the anatomical and physiological position of their recipient—the cerebrum. All mental phenomena depend upon alterations in the functional activity of the

latter; a cessation of this activity, as in profound sleep, is coincident with an abolition of mental action. Now the cerebrum is made up essentially of a series of ganglia, or, in other words, of concentrated and connected masses of gray nervous matter, and it is with the *dynamical* changes which go on in these centres that mental phenomena are coincident. All the sympathetic influences, therefore, which we have to consider, must reach these ganglia, and induce those requisite dynamical changes without which mental phenomena are never manifested.

If these primary considerations be granted, it follows that we must inquire carefully, in the first place, into the laws of action of the cerebral ganglia. This task has, indeed, been often undertaken. Every available means of research has been put in operation; the eye of the microscopist has penetrated, to their ultimate organization and disclosed the caudate vesicle, nucleus, or cell; the scalpel of the anatomist has traced their connexions with each other fibre by fibre; the test-tube and scales of the chemist have demonstrated their bio-chemical composition; the researches of the pathologist have shown how often morbid changes in structure or in chemical composition accompany morbid changes in functional activity; and, we must add, how often they do not. But, with all this admirable industry and skilful inquiry, we as yet know nothing of those intimate changes in the instrument, with which mental operations are coincident. Is it possible we can ever attain to a knowledge of them? The answer must be in the negative. If we know not the nature of the dynamical changes which occur in brute matter, coincidently with chemical, electrical, and magnetic phenomena, how much less can we know those which occur in organized matter? It is clear that we can only in the latter, as in the former, study the dynamical changes through the phenomena.

Vivisections, physiological experiments, and pathological observations, have been rendered available to a large extent in determining the functions of less complicated and less important ganglia than the cerebral; but, as to the latter, they have been of little avail, nay, have led experimental physiologists into errors which the philosophical physiologists have escaped. Thus Dr. M. Hall, finding that by pricking, tearing, irritating with chemical irritants, and otherwise mechanically acting upon the spinal chain of ganglia, and its continuation into the encephalon, as far as the tubercula quadragemina, he could excite the motor machinery into action, he came to the conclusion that the part of the great central axis, so responsive to mechanical irritants, was a distinct portion of it; and he drew a sharp line of demarcation between that tract and the cerebrum beyond, not only as to structure, but also as to function. Yet nothing could be more

fallacious. In the application of his mechanical irritants to the central ganglia, he could only imitate artificially those stimuli which naturally reach the gray masses and excite their functional activity; he therefore imitated those only which act upon the ganglia through the nerve-fibrils running to them from the skin, mucous surface, and tissues in general—or the nerves of what is termed common sensation,—and that in a very rude and imperfect way. All impressions reaching the central axis from special apparatuses, as those communicated through the senses of taste, smell, hearing, and vision, are, in fact, altogether inimitable by the methods ordinarily adopted by vivisectioners. The nearest approach to natural stimulus from these sources is perhaps obtainable by electricity or galvanism; but even with regard to these means it is very doubtful, indeed, whether any such dynamical changes could be induced by them in the cerebral ganglia, as are consequent upon impressions reaching them through the natural channel of communication from without.

Nor is there more hope from pathological research. Many a time and oft has it been alleged that the most careful dissection of the cerebra of the insane has revealed no change whatever in the gray matter; and many a time and oft has the hasty induction been made, that therefore we must not look for the seat of insanity in the encephalon, and that any morbid changes which may have been observed, must be considered rather as the effect than the cause of deranged functions. A careful consideration, however, of the essential nature of insanity, must inevitably lead to the conclusion, that in the cases which come strictly under the term, none other than a dynamical change, *analogous* to that of health, can be expected. A *manifest* structural change in the instrument of mind can only happen coincidentally with *abolition* of the mental faculties; whereas, in true insanity, the faculties remain, and are *perverted*. When the functional changes which induce insanity have passed into structural alteration, and the intimate tissue is so compressed by congestion or effusion, or so changed by disintegration, or imperfect nutrition, that it ceases to fulfil its functions, we have *loss* of mind, not *disorder* merely. That this is the common termination of many cases which end fatally, is simply a truism; the knowledge that the disorder of the intellect has so ended in structural change and in abolition, helps us nothing in the comprehension of the changes which occur during insanity itself, for we know nothing of the dynamical relations of the material instrument to the immaterial power.

Is there, then, no method, it may be asked, by which a better knowledge of the condition of the cerebrum in insanity may be obtained, and by which we may especially *learn* the laws of action of

those influences which, under the term *sympathies*, have so large a share in the causation and cure of cerebral disorder? We think there is a method available to these ends, and we shall now proceed to trace it out by the way of synthesis and analysis.

The propositions from which we can start with safety, are two, namely, 1, that the cerebrum is the organ of the mind; and, 2, that it is organised matter subject to the laws which regulate organised matter. If we trace its relations through general and comparative anatomy, we arrive at the conclusion, that it is constituted of ganglia, subject to the same laws of action as the ganglia of the spinal cord. This principle is based mainly on two great facts, namely, 1, that the cranium being homologically nothing more than the development of four vertebræ, the contained centres correspond to the central axis contained within the vertebræ, and consequently that, like the spinal ganglia, the cerebral are functionally subject to the laws of automatic, spontaneous, or reflex action. Physiological researches have now almost established this proposition, for the doctrine of "unconscious cerebration," recently propounded by an eminent neurologist, is none other than a development of this doctrine of *reflex cerebral function*. It is true that that lucid thinker connects sensation with the sensory ganglia as a necessary element in their functional activity; but it is obvious that with unconscious reflex action above these, in the hemispherical gray matter, and with unconscious reflex action below them in the spinal gray matter, this apparent exception will ultimately cease to be exceptional, and the great and fertile principle will be adopted, that the instrument of mind itself, like other portions of the nervous system, may act independently of mind, but automatically, adaptively, and as if regulated by conscious mind.

The importance of thus placing the cerebrum dynamically, in the same category with other portions of the nervous system, becomes more obvious, when we find, on tracing that system to its elementary constituents, that we must place it dynamically, in the same category with other living matter. After we have traced the analogue of the spinal cord of the vertebrata through the ganglionic chain of the articulata, we have still to push our analogies lower and lower, until we come to animals with a single ganglion, or multiplication of it, endowed with the simplest attributes in relation to external influences, but nevertheless presenting the same dynamical functions as the highest, inasmuch as within its more limited sphere of action that simple ganglion acts just as automatically, adaptively, and as if regulated by conscious mind. The transition, anatomically, from these lowest forms to those organisms in which no trace of nervous system can be found, is not difficult to follow; but it may appear startling to endow

the latter, physiologically, with powers which are usually thought to be the special endowment of nervous tissue. Yet to no other conclusion can we come, if we look at the functional dynamics of the simplest microscopical cell, for in this as in the series of ganglia, from the highest to the lowest, we still find the common principle of action, namely, ultimate adaptive action within the narrow world in which they act, as if regulated by conscious mind. We are thus, therefore, brought by our analysis to the ultimate cell, as the prime type of that system of dynamics which has its highest elaboration and development in the human brain.

How, then, does the cell manifest its adaptive and quasi-reasoning powers? In two ways—First, in evolution and development; secondly, in actual life. The natural history of the infusoria, is a grand illustration of the latter; the embryonic, or primordial cell of the human organism, of the former. To the contemplative mind, nothing is more wonderful amongst all the properties of vitalized matter than the successive series of vital processes, which, commencing in the primordial germ, are continually unfolded, each more complex than its predecessor, each giving rise to more marvellously constructed instruments, and more wisely adapted actions than the other, until the human brain is elaborated with the full perfection of the mature intellect, and the human form developed in all its beauty and glory. The instinctive life of the infusoria is an impressive illustration of what living matter is capable. According to botanists, they are Algæ; yet they are nothing more than simple cells, having their walls strengthened by silica. If these cells, in so low a step of the scale of organism, present such remarkable endowments, why should we attribute less of the adaptiveness and unconscious mind manifested by their acts to the cells of the gray matter of the nervous system in man, and the higher vertebrata? When writers speak and think of the brain as mere matter, they are little aware with what rare and wonderful powers the most insignificant and microscopic cell is endowed.

Cell-life in vegetables is a social life. The cells have a separate existence and division of labour. "The great object which I have kept in view throughout," Mr. Quekett observes,* "has been that of endeavouring to impress on you the fact, that each cell of a plant should be considered as having an independent or individual existence; that in one situation it may secrete colouring matter, in another, starch, gum, sugar, oil, &c., and in another the material for the reproduction of its species." Thus, certain cells, or classes of cells, have functions assigned to them, in the scheme of vegetable life. In the

* Lectures on Histology, p. 113.

scheme of animal life, the special organ of adaptation to definite ends—the gray ganglionic matter—is divided into parts having special functions assigned to each; their laws of action being writ (to use the words of Prochaska) in the nervous pulp, or, in other words, the cells of the ganglia have special functions assigned to them.

Now it is in the greater multiplicity of these special adaptations, that the higher organisms excel the lower; it is therefore in this exceeding multiplicity of functions that the human cerebrum excels all other cerebra. But every individual is ONE—a unity. Hence the necessity of intimate union, and of common action in these specialities. They all require to be *co-ordinated*. In the co-ordination of all the dynamical processes to a common end—namely, the well-being of the whole as a *unit*—we have that view of the processes known as *Life*, and those mutual influences developed termed *sympathies*. “Thus, turning to what is physiologically classified as the *vegetative system*, we see that the stomach, lungs, heart, liver, skin, and the rest, must work in concert.” We quote from a very able essay in the Westminster Review.*

“If one of them does too much or too little—that is, if the co-ordination be imperfect, the life is disturbed; and if one of them ceases to act—that is, if the co-ordination be destroyed, the life is destroyed. So, likewise, is it with the *animal system*. Its component parts, the limbs, juices, and instruments of attack and defence, must perform their several offices in proper sequence; and farther, must conjointly minister to the periodic demands of the viscera, that these may, in turn, supply blood.”

It is the nervous system which is the grand medium of communication between every part of the organism. The function of that system is, therefore, emphatically *internuncial*, as John Hunter most happily termed it. But the nervous system is also the great co-ordinating apparatus. It is, therefore, more especially the seat and source of all those adaptations and combinations of machinery by which the organism is maintained in being, preserved, and reproduced. In the motor system, we see how strength thus results from the co-ordination of action; “for it is produced by the simultaneous contraction of many muscles and many fibres of each muscle; and the strength is great in proportion to the number of these acting together—that is, in proportion to the co-ordination. Swiftess, also, depending partly on strength, but requiring also the rapid alternation of movements, equally comes under the expression. So, too, is it with agility; the power of a chamois to spring from crag to crag implies accurate co-ordination in the movements of many different muscles, and a due subordination of them to

* The Westminster Review, New Series, vol. i. (April, 1852) p. 472.

the perceptions. The definition similarly includes *Instinct*, which consists in the uniform succession of certain actions, or series of actions, after certain sensations, or groups of sensations; and that which surprises us in instinct is the accuracy with which these compound actions respond to these compound sensations—that is, the *completeness* of their co-ordination. Thus, likewise, it is with *Intelligence*, even in its highest manifestations. That which we call *rationality* is the power to combine or co-ordinate a great number and a great variety of complex actions for the achievement of a desired result.”

Now, if from extraneous causes, the co-ordinating apparatus be so altered that this uniform succession of certain actions, or series of actions, with their corresponding sensations, or groups of sensations, be interrupted, and a link in the chain be pushed out of its proper position or severed, *disorder* will take the place of order, and there will be abolition, perversion, or irregularity of the entire series of processes. If, then, this condition arises in the co-ordinating apparatus of the intellect, of the feelings, of the emotions, of the appetites, of the instincts, we have various manifestations of *DISORDER of the mind*. If, on the other hand, it take place in the co-ordinating apparatus of the muscular system, we have the various manifestations of *disorder* in the motor portion of the nervous system, grouped under the term *MOTOR neuroses*.

It is thus, therefore, of primary importance in the investigation and cure of disorders of the mind, to trace the morbid phenomena up to the broken or strained link in the series, and determine accurately the exact relation of the breach in the continuity of the series to the immediate antecedents, or the *cause*. That cause is often none other than that influence of one series upon another which is termed *sympathy*; and we shall now proceed to illustrate by practical applications the method of investigation to be followed in determining the origin, nature, and relation of these sympathies, in reference to the etiology and treatment of insanity.

Blood Sympathies.—The lowest organic process is growth; in the cell it involves two processes—accretion and disintegration, nutrition and removal, repair and waste. This process is therefore the essence of life; so soon as the one ceases the other is extinct. The entire co-ordinating apparatus of the organism will therefore be directed to three great ends—namely, 1, supply of material; 2, supply of oxygen; 3, combination of material and oxygen in nutrition. Now the blood is the medium by which these three processes are perfected, and is the great agent, therefore, by which the co-ordinating processes are put in operation. Hence it is that the blood acts so incessantly in the co-ordinating apparatus—the nervous system. But if the blood be so changed in its

composition that it develops violent or irregular action in the nervous system, what will result? Let us examine a little more closely.

We will suppose that the supply of nutrient material has been wholly suspended for a certain period, or, in other words, that hunger has been experienced. If nutrient material be supplied, and the appetite appeased, the chain of sympathies is completed, and the end is gained. But if food be not supplied, in a while disorder begins. The entire machines of the organism are co-ordinated to one great end, and are gradually involved in the sole business of seeking food, to the neglect of their proper functions. The actions become impulsive and instinctive; the higher powers are in abeyance, or are perverted; and the man becomes a mere animal. He becomes this the more emphatically in proportion as the restraining power of the latter over the appetites and instincts was originally small, and *vice versâ*. Histories of shipwrecks and marches illustrate this state of things. It is the same when an insufficient supply of water is sent to the blood, and *thirst* is experienced. Major Mitchell made three expeditions into the interior of Australia, taking with him "convicts on leave." His party was sometimes exposed to extreme privation, especially of water, and he remarked that it was the worst characters that had the least control over their appetites under these circumstances. "It was a standing order," he says, "which I insisted upon being observed, that no man should quit the line of march to drink, without my permission. There was one, notwithstanding, who never could, in cases of extremity, resist the temptation of water, and *who would rush to it, regardless of consequences*. Now this man continued to be an irreclaimable character, and in six years after had lost all the advantages he gained by his services on this occasion."*

We are inclined to think that this general blood-sympathy will throw light on the origin, nature, and treatment, of those cases of mania which commence with, or during their course exhibit, absolute anorexia. In the treatment of ordinary cases of mania at home, such is the terror and disgust inspired, and such is the carelessness and ignorance displayed, that the patient is not supplied with necessary food and drink. The poor sufferer is himself unable, perhaps, to indicate his desires and wants, or it may be that the condition of that portion of the sensorium in which the sensations are felt, is not capable of transmitting the impressions to the consciousness, although it can draw the rest of the co-ordinating apparatus into the chain of morbid actions; and so it happens, that because food and drink are not asked

* Three Expeditions into the Interior of Australia, &c. By Major Mitchell. Second Edition, vol. i. p. 58.

for, they are not given. Often have we been struck with the weak, hoarse voice, the clammy tongue, cleaving to the mouth, the haggard look of the poor maniac under these circumstances; often, too, by touching their hidden sympathy, we have been able to re-construct for a moment, the broken chain of co-ordinations, and so far awake the sufferer to ordinary consciousness, that he has greedily gulped down the cooling draught of water presented to him. In many cases, indeed, of this kind, the sole remedies are kindness, food, and drink.

Certain articles of diet are necessary to the proper action of the nutrient apparatus. If these be wanting in the blood, the desire arises for them. Hence spring what are termed *longings*; hence, also, *depraved appetite* for food. Fresh vegetable food is one of these. The case of a furious maniac came under our notice, whose history well illustrates the value of attending to the philosophy of this kind of blood-sympathy. For many weeks he was destructively maniacal, partly against persons, but only from sudden bursts of irritation; principally against things, so that not a chair or a window escaped his violence. He broke 200 squares of glass in a very short time. What was remarkable in his case was this, that he ate ravenously of his food all the time, but however well-fed he would not let a blade of grass, or a weed, or a green thing grow in the airing-court in which he walked. If his hands were restrained, he knelt down and tore up the weeds with his teeth. Noting this instinctive appetite, we directed that he should be supplied with uncooked carrots, celery, &c., *ad libitum*, believing that it was an indication of a morbid condition of the blood,—probably an exciting cause of this maniacal state. The result justified our deduction; and as hopeless a case as it has been our lot to witness, was perfectly restored to health and sanity. Other illustrations of these modifications of the natural appetite from blood-sympathies, are presented in cases of *chlorosis* in young females, of pregnancy in others, and by negroes labouring under that kind of appetite which leads them to eat earth, and in which there is obviously a condition of the blood almost identical with that of chlorosis. Ben Jonson, in his play of the “Magnetic Lady,” gives a summary of the *desideranda* in cases of this kind:—

———— “She can cranch
A sack of small coal, eat your lime and hair,
Soap, ashes, loam, and has a dainty spice
Of the green sickness.”*

Bulimia, *Polydipsia*, and *Pica* in all its varieties, may therefore be excited by a morbid condition of the blood awaking abnormal actions in the co-ordinating apparatus. Perhaps, also, to this class of phenomena

* Act i., scene i.

may be referred that still more lamentable form of depraved appetite, well-known to the psychological physician as *oinomania*, the most characteristic symptom of which is an irresistible craving for nervine stimuli, but more especially the alcoholic.

These results of morbid blood-sympathies are comparatively normal if we take into consideration another group, namely, those characterized by an appetite for what is horrible and disgusting. Some insane persons eat excrement greedily, others any garbage. *Lycanthropia* belongs to this class of depraved appetites—consisting essentially in an appetite for raw flesh. However these may originate—that is to say, whether from disordered action in the nervous system, arising idiosyncratically, or whether excited by blood diseases, or whether induced by the sympathies of certain viscera (to be presently described), there is this characteristic,—that the morbid appetites developed in these forms of insanity are manifested in lower animals as their *normal* appetites. This is a most important characteristic, and is, indeed, common to numerous aberrations of the instincts and emotions in the human being. How the latter originate is, indeed, a mystery; but they show this much, that there are, in the depths of man's nature, hid away and covered over, if the expression may be used, natural sources of mental phenomena, which are the proper characteristics of brutes. It is as if, in man's mental frame, as in his physical, there may be a retrograde manifestation of organs and uses; as if the brute instincts may appear in him, according to the same law that there is sometimes found a divided lip, or a two-horned uterus—monstrosities of mental development, analogous to the corporeal. The manifestation in idiots of these lower series of co-ordinate acts, is by no means unusual. An idiot girl is delivered, when alone, of a child, and like the females of lower animals, she tears the umbilical cord with her teeth. Dr. Corsellis mentions in his Report for 1851, of the West York Lunatic Asylum, at Wakefield, the admission of a congenital idiot boy, aged 12, said to have been left in a cottage by some gipsies. He is thus described:—

“He is unable to speak, and in appearance and habits partakes more of the brute than the human species, expressing pleasure or disapprobation by a wild cry, or by flapping his arms to and fro like the wings of a bird, and being destitute even of such intelligence as would enable him to be destructive or mischievous. A peculiarity marking the case of this singular child is, that he ruminates his food. When eating, his food is bolted or rapidly swallowed, without mastication. As soon as the meal is finished, the ruminating process commences. A portion of food is raised from the stomach, sometimes by a visible effort, but not always accompanied by eructation; the morsel is then deliberately chewed and re-swallowed. Afterwards, a fresh portion is raised in a similar manner, and the process continues for a quarter of an hour or

longer. During rumination, he remains quiet and completely absorbed in the act. If the morsel brought from the stomach is large, he divides it into two portions, retaining one in the fingers, until the other has been masticated and re-swallowed. The regurgitated food has an acid reaction."

Several points of retrogression are illustrated here; perhaps the instinctive motions indicating pleasure and pain, and the development of the ruminant instinct—a thing necessary, probably, for the nutrition of this idiot, as he would be liable to be neglected in feeding—are the most interesting.

The Visceral Sympathies.—There are two groups of the viscera, if they be classed with reference to their relations to the co-ordinating apparatus. We place together in the one the organs which receive and commingle the oxydizable and oxydizing matter—the blood; the organs which circulate it; the organs which depurate it. These are, respectively, the lungs, stomach, spleen, and small intestines; the heart and vascular system; the liver, kidneys, large intestine, and skin. Their sympathies all concern the individual. The organs of reproduction of the species constitute another group; their sympathies are a class to themselves; they all concentrate on the union of the two sexes, and on the offspring resulting from that union. In short, they do not concern the *individual*.

In considering these extensive sympathies, psychologists have hardly discriminated between those which are purely dynamical, those which are functional, and those which are structural or organic. Thus, the uterus and ovaria act upon the stomach, mammae, kidneys, or intestines, and induce various important functional changes as they act through the spinal cord by a direct physical influence on that centre of impressions and actions. It is not so when the ovaria act upon the encephalon, and bring various reproductive and parental instincts into operation; for the new world of thought and feeling thus opened out seems to depend upon a different chain of causation. So it is also with the viscera; since they appear to have a similar double action on the cerebrum. Let us examine these more in detail.

The *sympathies of the heart and lungs* are two-fold. First, they co-ordinate the internuncial apparatus for the development of the conservative operations of the organisms, in so far as they are directed towards the due oxygenation and circulation of the blood. Any attempt to stop the ingress of air to the lungs, is resisted with the concentrated energies of the whole system; any arrest of the flow of blood through the heart excites unutterable distress. This profound implication of the instinct for existence, and of the instinctive feeling of horror for its cessation, is more or less developed to the consciousness

whenever the functions of these viscera are interrupted by structural or functional disease. Hence the indescribable anguish and restlessness experienced in certain diseases of the heart and lungs; and hence the connexion between the latter and hypochondria. The morbid condition of the heart need not necessarily be *structural*; any change in the *innervation* of that organ, sufficient to excite morbid sensations, will act upon the co-ordinating apparatus, and excite the instinct into action. Perhaps in cases of mania, melancholia, and hypochondriasis connected with structural and functional derangement of the heart, the series of consequences and antecedents is probably something of this kind:—Enfeebling influences, of a mental origin, act upon the nervous system and through it upon the heart; its innervation thus becoming deranged it reacts upon the nervous system, which in its turn reacts upon it; and so by alternating influences various cerebral and cardiac diseases are induced. Excessive study, exhaustive amatory indulgence; strong emotions, especially those that are painful, as anxiety, grief, terror, fear, and the like, are well-known to have a direct influence on the heart and lungs. It is now also becoming more certain that, contrarily, the doctrine first advanced by Nasse in 1817 is well-founded, and that the heart has a most important influence on the cerebrum in exciting functional disorder therein.

The remarks applicable to the heart and lungs are applicable to the entire group of viscera, in which the sympathies concern the welfare of the individual; for in the diseases of all it is the instinctive love of life and fear of injury and death which, in the first instance at least, is morbidly developed. From this, as from a common root or stem, spring certain forms of monomania and certain monomaniacal illusions and delusions.

A hypochondriacal patient may remain all his life with no further mental disorder than the groundless anxiety for his health which devours him, and the morbid attention to one or other of the organs in which he feels uneasiness, that characterizes the affection. But he may easily pass into other stages. The instinct itself may be absolutely *perverted*, just as we have seen the appetites are perverted, and then a *suicidal* impulse is developed. Or the disorder may extend from the more simple instinct of conservation, acting irrespective of external agencies to the instinct of self-defence, of which the idea of something injurious to the organism acting upon it from without is the basis. This will again present modifications,—e. g.; the sufferer may *suspect* that his ailments are induced by poison, or by other secret arts, or by mysterious agents, as electricity, witchcraft, diabolical agency, or the anger of the Deity. He may connect some individual with this notion, and the instinct may then become *homicidal*; he may simply feel

instinctive horror for his position, and groan helplessly in profound *melancholia*. He may refuse incessantly the food offered him, fearing to be poisoned, or watch the live-long night against his imaginary enemies. Constant anxiety, anorexia, and sleeplessness do their work, and at last the entire intellect gives way, and complete mania is established. Now we do not intend by any means to insist that in no case do these symptoms spring from idiopathic cerebral disease; on the contrary, we think it certain that instances of that kind are constantly met with in practice: all that we urge here is this,—that morbid innervation and disordered functions of the heart, lungs, and other viscera, have a *dynamical* effect on the instinct of self-preservation; that a play of affinities between the cerebrum and viscera is thereby established; that from the morbid development of this instinct other charges in subordinate instincts radiate as from a common centre, and that finally the whole of the co-ordinating apparatus is involved in the chain of morbid causation. In many instances, morbid innervation may predominate; in many there may be simply disordered functions; and it will be right to discriminate in practice as to the two.

Morbid functional sympathies arising from the viscera all act by quickly changing the composition of the blood. It is in this they specially differ from morbid innervation, which acts directly on the cerebrum. In disease of the lungs, there is imperfect oxygenation of the blood; in diseases of the liver, kidneys, and large intestines there is imperfect depuration. As to the connexion between cerebral disease of every kind and *renal* disorder, no experienced practitioner can have any doubt: it is even more obvious than the influence of disordered *hepatic* function. Popular opinion certainly accords with pathological research as to the influence of *functional* derangement of the liver in the mental characteristics.

“ * * * * * Væ meum
Fervens difficili bile tumet jecur,
Tunc nec mens mihi nec color
Certa sede manet.”

HOR. *Carm.*

There is much difference of opinion as to the extent and nature of the connexion between disease of the *colon* and insanity. Esquirol first distinctly observed that displacement of the transverse colon such that it assumed a vertical position descending perpendicularly into the pelvis behind the os pubis, was a noticeable feature in the pathological anatomy of the insane; he found it in 33 out of 168 bodies of individuals labouring under melancholia. Bergmann published the dissections of 13 cases, in which very considerable contractions

were found in the colon.* In some it was likewise displaced nearly in the manner described by Esquirol. In combination with this state of the colon, (we quote Dr. Prichard's summary,) Bergmann found the following morbid phenomena:—plethora of the abdomen and the encephalon; hæmorrhoidal disease; tumefaction of the spleen, liver, and uterus; distention of vessels in the brain. The mental phenomena in such instances are chimerical ideas. The patient thinks he has animals in his entrails, as frogs or serpents: perhaps to this class of cases belong those in which the patient has a conviction that he is without stomach or bowels at all. Guislain confirmed these researches, and attempted to account for the anatomical phenomena by attributing them to inflammation. The question for us to consider, however, is, what relation do they bear to mental disorder? Now on this point it has been forgotten that the colon is a depurating viscus, and that there is an undoubted connexion between the presence of large quantities of offensive fæcal gases and insanity, so that the disease may act on the cerebrum by preventing effective depuration of the blood.

Direct visceral sympathies do, however, constitute a large and important group, and to this the disease of the colon just noted may belong. Nothing is more common than to connect gastro-intestinal and hepatic irritation with mental derangement. The right theory, or such a theory as modern neurology supplies, is hardly comprehended. Close observers of diseases of the nervous system, cannot fail to have seen how frequently paroxysmal diseases, sleeplessness, mental irritation, and mania are connected with obscure irritation of the gastro-intestinal mucous membrane. Epilepsy and mania have been traced to intestinal entozoa; there is no more common cause of sleeplessness, than irritation of the gastro-mucous membrane, by an excess of acid in the fluids; and indeed, no better anodyne than a tumbler of cold water to dilute the acid, or an alkali to neutralize it. We have seen sound sleep come on in a few minutes, after hours of restlessness, as if induced by magic by this simple but potent remedy, much more potent, indeed, than any narcotic. In like manner, the copious evacuations of offensive accumulations in the intestinal canal, has been followed by the happiest results. So also the ablution of a hot and irritable skin, or a soothing application to an eruptive disorder, has induced repose of the stimulated cerebrum, when other and apparently more suitable means have failed. They who have witnessed the results of simple means like these, judiciously applied, can readily understand how easily the homœopathic physician will persuade his patient that the infinitesimal dose was the medicinal agent, and not the vehicle or the adjuvants. Chronic disease of these surfaces is no unfrequent exciting cause of mental disorder.

* Prichard's Treatise on Insanity, p. 231.

The *dynamical sympathies of the reproductive organs* constitute a group of singular interest and importance in every way. They are separated by a distinct characteristic from the merely visceral, and thus the study of them is much facilitated, for while the latter involve the instinct of self-preservation, the sympathies of the reproductive organs override it, and co-ordinate the internuncial apparatus to quite different ends. They can be traced also, without difficulty, directly to the influence of the reproductive organs; for these are subject to periodic activity and repose, or can be wholly removed by vivisections or otherwise altered. For the same reasons, observation and experiment can be brought to bear upon a definition of the precise degree and extent to which the organs themselves react upon the nervous system, and enable us to determine exactly what instincts, emotions, and intellectual operations are subject to their sympathetic influence.

We do not propose to go over the well-beaten ground of the psychology of physical love; our task is a much less ambitious one, but not less important. What is wanted, is, to fix the connexion between these organic sympathies and certain forms of mental derangement. Now they appear differently in the two sexes. In the female more obviously, more variously, than in the male. It is in the lower animals, in which there is a periodical *nîsus* and repose, that we can best determine the influence of those sympathies, and we accordingly find that, in the entire scheme of animated creation, the *instinct to fight* and use the natural weapons of offence and defence, (supplied to him almost exclusively,) is developed in the *male* animal by functional activity of the reproductive system. Fishes, birds, mammals, the timid and the bold, all display this characteristic during the reproductive viscus.

“Omne adeo genus in terris hominumque ferarumque
Et genus æquoreum, pecudes, pictæ volucres
In furias ignemque ruunt. Amor omnibus idem.”

VIRGIL: *Georg.*, 242.

The difference between the animal at the season of reproduction and at the time when the instinct is in abeyance, constitutes one of the most striking illustrations of the power of a distant organ over the cerebral functions. In the vertebrata it is not more obvious than in the invertebrata, but it is more curious as a phrenological fact. It cannot be supposed that, during the manifestation of this and connected periodic instincts there is an increase or diminution of the *phrenological* organ in the cerebrum in proportion as the organs of reproduction are active or inactive; to what then must we attribute the change? No other explanation includes all the facts, than the hypothesis that there is an appropriate molecular organization of the

cerebrum, which co-ordinates to the intended end, to be put into action by an appropriate stimulus. The latter being applied the former becomes active; just as a bar of iron continues magnetic so long as a magnetic current passes through it. That the stimulus is requisite to the co-ordination, is proved by the results which follow removal of the organs necessary to reproduction. The unmanly expression and manner of the effeminate male is due to the *want* of the stimulus; on the other hand, in viragos the transformation from the feminine to the masculine temper and manner seems due to the shrinking of the ovaria, and probably to the *change* in the nature of the stimulus which they give to the system consequent on that shrinking. That this pathological condition occurs in the ovaria of the female *gallinaceæ*, when they assume the feathers of the cock-bird, has been shown by dissections.

Vanity in men and women as to personal appearance, is often seen to be developed as a symptom of insanity. The *Adonis* of the lunatic asylum cultivates the natural ornaments of his sex with sedulous care. Hence the attention devoted to the whiskers, moustache, beard, and hair. A similar characteristic in the female is well-known to popular writers.

“For never did this maid—whate’er
The ambition of the hour—forget
Her sex’s pride in being fair;
Nor that adornment, tasteful, rare,
Which makes the mighty magnet, set
In woman’s form, more mighty yet.”

Perverted, it constitutes, indeed, part of the popular idea of insanity in the female. It is, we need hardly say, always bizarre, absurd, and eccentric in its effects. Who, accustomed to the insane of the gentler sex, has not witnessed over and over again, manifestations of this foible in strangely decorated bonnets, odd caps, curiously quaint ornaments, and the like? The *manufacture* of these ornaments out of the most unpromising materials, is a not less curious development of (as we think) an instinct in insanity. It is in the *female* that the instinct for making up materials is *most* manifested. This is seen even in lower animals. That the preference for ornaments and for feminine work belongs not unfrequently to this class of instincts, is known by its absence in the virago; on the other hand, the ornaments of the male birds of almost every family, and of the males of many animals, far exceed those of the female, and are demonstrably dependent upon the development of the testes.

We ought not to omit one effect of these distant and singular sympathies, namely, the remarkable loss of appetite for food when the amatory impulse is urgent. It is observed in lower animals as well as in

man. Stags, and others of the class, are scarcely ever seen to eat during the whole rutting season. "It is a physical observation," says Fielding, in 'Joseph Andrews,' "that love, like other sweet things, is no whetter of the stomach." This anorexia is sometimes developed in a remarkable degree in hysterical girls; Ann Moore, the "fasting woman" of Tutbury, was one of numerous examples that might be mentioned. It is not improbable that various morbid appetites may be only perversions of this instinct for food, induced by ovarian influence, as when the females of lower animals—sows, cats, &c.,—eat their offspring.

Monomaniacal cunning in the human female is another instinct morbidly developed by ovarian sympathies. The same influence which makes the male of lower animals quarrelsome during the season of procreation, makes the female cunning and cautious. The skill displayed in the choice of a secret place for the eggs or young, and the finesse practised to lure or scare away the destroyer, are wonderful displays of instinct. The lioness may be mentioned as one illustration of many, for, ferocious as she is, she places no reliance upon her strength to defend her young; but when she fears that the retreat where she has hid them may be discovered by her footprints, she effaces them with her tail. *Klepto-mania*, or the impulse to steal (acquire cunningly), appears to be related to the monomaniacal *cunning* we have just mentioned. Like the latter, the former is generally observed in females, and most frequently during a period of ovarian or uterine activity. These two will occur, indeed, in the same patient, and then the criminal results of the combination are very remarkable; but cunning is more frequent in the hysterical, theft in the pregnant or parturient woman. Both are very compatible with that *modesty* which is a great charm in the sex, and which being itself a sexual characteristic, may be developed concurrently with others of the class. From time to time these monomaniacal impulses are seen in pubescent lads; some of these have been indeed the most successful travelling *illuminati* of the itinerant mesmerizer or electro-biologist. The curious forms which *cunning* of this kind assumes are very interesting, if in compared with the habits and practices of lower animals. In this, as the other instincts, a lower stratum appears to "crop out" in the insane.

There is another faculty under the control of the reproductive organs, of which we ought to say something,—the *instinct for musical sounds* and *rhythmical cadences* which the action of the ovaria and testes excite in a great variety of animals, as well in the *articulata* as the *vertebrata*. The voice is exclusively developed in the males of some animals; in others it is feeble and unmusical in the female; rich, full-toned and melodious in the opposite sex. The horse and horned cattle,

the gallinacæ, and all singing birds, afford ample illustrations of this connexion. In man the instinct is manifested in the rhythmical and harmonious collocation of words and cadences, from the "woeful ballad made to a mistress' eyebrow" to the highest and grandest poesy. An illustration of this amatory instinctive development of the musical faculty, is related in the biography of Paganini. It was love that first made manifest his magical power on the violin; the history is thus given by himself:—

"I was playing at the court of Lucca to the princess (Napoleon's favourite sister) and another fascinating creature, that must be nameless, who, I flatter myself, felt a penchant for me, and was never absent from my performance. On my own side I had long been her admirer. Our mutual fondness gradually became stronger and stronger; but we were forced to conceal it, and by this means its strength and fervour were greatly enhanced. One day, I promised to surprise her, at the next concert, with a musical joke, which should convey an allusion to our attachment; and I accordingly gave notice at court that I should bring forward a musical novelty, under the title of a *Love Scene*. The whole world was on tiptoe; and, on the evening appointed, I made my appearance, violin in hand. I had previously robbed it of the two middle strings, so that none but the E and G remained, the first string being designed to play the maiden's part, and the lowest the youth's. I began with a species of dialogue, in which I attempted to introduce some events analogous to transient bickerings, and reconciliations between the lovers. Now my strings growled, and then sighed; and anon, lisped, hesitated, joked, and joyed, till at last they sported with merry jubilee. Shortly both souls joined once more in harmony, and the appeased lovers' quarrels led to a *Pas de deux*, which terminated in a brilliant *Coda*. This brilliant fantasia of music was greeted with loud applause. The lady, to whom every scene referred, rewarded me by looks of delight; and full of sweetness; and the princess was charmed into such amiable condescension, that she loaded me with encomiums; asking me whether, since I could produce so much with two strings, it would not be possible to gratify them by playing only on one. I yielded instant assent. The idea tickled my fancy; and, as the emperor's birth-day was at hand, I composed a *sonata* for the G string, which I entitled 'Napoleon,' and played before the court with so much effect, that a cantabile, given by Cimarosa, fell without producing any impression upon the hearers. This is the genuine and original cause of my predilection for the G string."*

Responsive Sympathies.—By this term we mean to imply that large group of sympathies which are called into operation by sensorial

* "THE MUSIC OF NATURE; or, an Attempt to prove that what is passionate and pleasing in the art of Singing, Speaking, and Performing upon Musical Instruments is derived from the Sounds of the Animated World." By Wm. Gardiner. London: 1833. Pp. 222.

stimuli derived from without, in which there is some hidden cerebral mechanism that *responds* to the stimulus ; and which, in so responding, puts the whole nervous system into co-ordinate action. The entire group of the instincts, emotions, and passions, when developed by sensorial stimuli, or external impressions, become responsive sympathies ; but there is a less obvious, but not less important class, which belongs to conceptions and ideas of memory, and to cerebral changes induced by circumstances of which memory retains no trace.

We have seen how uniformly and constantly there are developments in cerebral organization correspondent to the varied stimuli which the organism can receive under any circumstances within the limits of its powers. Some of these developments are *natural*, and have existed in the species *ab origine* ; some are *acquired*, and are only recent ; many seem to belong (as we have seen) to a lower grade of development ; as if the cerebral organization of some antecedent existence had been *transmitted* from a lower life, to reappear and be awakened into action by external impressions when the higher developments are in abeyance. Many, too, we must add, seem to belong, on the other hand, to a higher stage of existence ; so that when an appropriate stimulus falls, as it were, haphazard upon the material development, a strange and transient gleam of mysterious consciousness flashes across the mind—an idea—a notion—a vision,—as of something known aforetime, appearing, for a moment, from the depths of the intellect, yet leaving an indefinite but ineffaceable impression. In this way it is that the thoughts become rife—

“With airy images and shapes which dwell
Still unimpaired, though old, in the soul’s haunted cell.”

Perhaps we have something of this kind in the retention by domesticated animals of certain instincts of their wild state ; or in the re-appearance of such instincts when the domesticated animal has again become wild. The dog, for example, retains the instinctive act of turning himself round and round, and scratching his bed-mat or bedding before he goes to rest—a useless movement under the circumstances. So also several varieties of dogs retain the instinct of concealing their food in the ground—a wild instinct. The wild horses of South America are descendants of the domestic breed. In them we see the full development of gregarious instincts, which are hardly apparent in the stock from which they have sprung. So also there appear to be in civilized man traces of those ideas which occupied the mind of his uncivilized ancestor, when “wild in woods the noble savage ran.” Sir R. H. Bonycastle observes, in his work on Canada, “The best specimen of an Indian missionary I am acquainted with in Upper Canada forgot all his instruction, all his acquired feelings and habits, when he witnessed

with me the war-dance of heathen and perfectly savage warriors. He had been carefully educated from a boy, was modest, intelligent, and well-bred, . . . yet he grinned with delight at this exhibition of untutored nature." Who has not felt the wild excitement which comes over the feelings, when wandering free over hill and mountain in the full enjoyment of health? The external stimulus of a trackless surface, the feeling of freedom from social restraint, the fresh breezes, and all the change from town to country existence, touch chords of enjoyment deeply hidden in the soul, and render us competent to understand how it is that the Indian or back-woodsman flees before advancing civilization. In *Huc's Travels in Tartary and Thibet*, we find an interesting illustration of the existence of dormant sympathies, transmitted from pre-existent ancestral modes of life, of this kind.

"Among the Lamas who came to recreate for awhile at Tchogortan we remarked," says M. Huc, "especially a number of Tartar Mongols, who, bringing with them small tents, set them up in the valley along the stream, or upon the sides of the most picturesque hills. There they passed whole days, revelling in the delight of the independent life of the nomades, forgetting for a while the constraint and confinement of the Lamanesque life, in the enjoyment of the free life of the tent. You saw them running and frolicking about the prairie like children, or wrestling and exercising in the other sports which recalled the days and the land of their boyhood. The reaction with many of these men became so strong that even fixity of tent was insupportable, and they would take it down, and set it up again in some other place, three or four times a day; or even they would abandon it altogether, and taking their kitchen utensils and their pails of water, and their provisions on their shoulders, would go, singing and dancing as they went, to boil their tea on the summit of some mountain, from which they would not descend until nightfall."

We might multiply illustrations of this kind to an indefinite extent, and trace the springs of action of nations as well as individuals to sympathies deeply writ in the organism, but latent and dormant until the stimulus is applied. We could point out the connexion between these and great social changes, in periods of revolutionary disturbance. It is then that society is agitated to its lowest depths, and dormant instincts, hitherto pressed down by the weight of law and order, spring forth when that weight is taken off and their appropriate stimuli applied, to the astonishment of a wondering world. This branch of psychology is not, however, our present theme. We have now to consider not social but mental disorder, and to say something of

The Sympathies as curative Agents in Insanity.—The proposition we have to state on this point may be readily gathered from the preceding remarks. The treatment of insanity in its entirety consists in the

application or removal of the stimuli to the sympathies. Of those which are purely corporeal, we have already indicated the relations; we have, therefore, to treat only of the mental. A right knowledge of the uses of these sympathies constitutes the only sound basis of the *moral* treatment of insanity. Therapeutically, we may consider them in their threefold aspect of the instinctive, the emotional, the intelligential. Now, as to the two former, the rule is this: the manifestation of them in one individual excites them in another. If we would excite anger, we must be angry; if we would excite attack, we must attack; if we would excite pleasant friendliness, we must greet friendly, and show kindness in actions. How often do we see the magic effect on the insane of a sunny, kindly smile!—

“Like moonlight o’er a troubled sea,
Brightening the storm it cannot calm.”

Undoubtedly, a gentle winning demeanour towards the violent and sullen, is of very potent curative influence. One of such a temperament (Byron) knew its influence well:—

“It is in vain that we would coldly gaze
On such as smile upon us; the heart must
Leap kindly back to kindness.”

The non-restraint system of treating the maniacally violent is founded wholly on this psychology of the instincts and emotions. Personal restraint in the *sane* excites resistance—how much more in the *insane*, in whom the disposition to attack and resist is morbidly excited. It is very worthy note, however, that when personal restraint is *necessary* (as surely it must be in *some* cases of maniacal violence), that restraint must be applied in accordance with this principle. Is it not questionable, then, whether the use of *persons* for this purpose be so advisable as the use of *things*? We doubt, indeed, whether the *attendant* can himself remain perfectly free from emotion when his corporeal energies are called forth to resist the struggles of a violent maniac, so potent and ever active are the stimuli to these instinctive emotions.

The same principle of applying or removing these stimuli is applicable to other instincts and emotions morbidly developed. In a case of suspecting melancholia, a *really* frank and truthful manner and mode of treatment will alone gain the confidence of the patient. The slightest attempt at deception is not only quickly perceived by the morbidly developed instinct, but it immediately excites that morbid development more fully. When the suicidal impulse is the special characteristic, arguments addressed to the judgment will fail, when the perverted or abolished instinct of love of life may be restored by any means which tend to excite it. Thus it will happen that when the patient urgently

desires certain means of self-destruction, the impulse may be checked by suggesting to him the choice of other means; e. g., a razor being desired by the monomaniac to cut his throat, if arsenic be suggested to him as an equally effective means, with an explanation of the anguish it inflicts, he would shudder at the idea of self-destruction, since the contemplation of the pain, and of death by other means than that upon which his "fixed idea" dwells, rouses the dormant instinct of love of life and ease. It is from the same causation that a half successful attempt at suicide sometimes cures the patient, or checks the progress of the disorder. An illustration of this kind is mentioned by Dr. Burrows, in his "Commentaries." It is true that *he* attributes the cure to "fever," but it is obvious that it was only *feverishness* from which the patient suffered; and this must be considered as wholly inadequate to the cure of suicidal insanity.—

"A gentleman, aged forty-five, in a state of melancholia, with a strong propensity to suicide, was walking with his keeper on Battersea Bridge. By a sudden effort, he broke away and jumped into the Thames. It was on a Sunday, and as many boats were passing in the river, assistance was immediately given; but he resisted so much, that it was only by main force he was taken out of the water and conveyed to his residence. Having some distance to go in his wet clothes, he caught a violent cold, followed by rigors and a smart fever. For this, I prescribed suitable remedies; but I took no notice, nor made any inquiry of him respecting his late rash attempt to destroy himself. During the fever, he was quite docile and collected. When it had subsided, I reasoned with him on the subject. He confessed himself horror-struck on the reflection of the act he had committed, and entreated I never would again mention it. In fact, his mind was entirely free from all delusion; and in a fortnight he returned home cured, and has remained well ten years."

Dr. Burrows quotes this case as an illustration of the curative effects of "fever," with the object of supporting a theory of the relations of the cerebral circulation to mental disorder. That insane patients have recovered after attacks of fever is certain, but the order of events is doubtful; it *may be* that the functional changes in the circulation within the cerebrum begin the cure in some, but in others (as the *suicidal* forms), it *may be* that the vis conservatrix, having been roused by the fever into action, has extended its influence to the instinct of love of life, and restored it to orderly impulses.

The case just quoted may serve, as well as another, to illustrate that part of the moral treatment of insanity, which consists in the *removal* of stimuli. In a vast majority of cases of destructive insanity, from impulse, the impulse is developed by the presence of the object to be destroyed (when it is a thing or another than the *self*), and of the

means adopted to the destruction desired. These constitute the *stimuli* of the instinct. In Dr. Burrows's case, the flowing river excited the paroxysm; indeed, it is a well-known practical point in the construction of asylums, to avoid a site within reach or view of a river or of water. A case equally illustrative of the general principle, once came under our own notice. A female, aged about 35, delivered three months ago of her third child, consulted us about the "temptations" to which she was exposed. She explained that they came on in an instant, as quick as lightning, and after continuing for a moment would pass off. When nursing her infant she is tempted, in this instantaneous manner, to dash it to the ground, trample on it, and destroy it. She is also tempted to destroy herself, sometimes in one way, sometimes in another. Going through a passage to the house, for example, she is suddenly tempted to dash her head against the wall, or if she see a knife on the table when the child is in her arms, she feels a sudden desire to seize the knife and cut the child's throat. When other instincts are roused, of which the stimuli are less sensational and more intelligential, the connexion between cause and effect is not so obvious, but can nevertheless be traced by a careful analysis. The most remarkable instance of moral insanity we ever met with, was in a young girl, who combined *cunning* with the impulse to suicide, cruelty, and destruction of life. She was of very simple manners; and being modest in her demeanour and language, never gave an indication of the latent devil within her; but when at all under the influence of cerebral excitement, she would snatch at or pinch any one passing her, or kick at those near her—without, however, betraying the slightest change of gesture. By pressing blandishments she would persuade some old and feeble person to go into a corner, or other convenient spot, out of hearing of those around her, and then changing her manner, endeavour to get them to deny their Saviour, on pain of the most terrible vengeance. When she succeeded (as she did occasionally), she would dance about and seem delighted with the idea, which she loudly expressed, that the object of her cruelty would now be sure to go to hell. It was quite unsafe to leave her alone with a child or a feeble patient, as she would immediately most cunningly plot their destruction; and it was believed that she had succeeded in one instance, if not two. She often attempted suicide. It always appeared that *to be left alone* was the great stimulus to her suicidal or homicidal attempts, and that the chain of effects began with the impulse to secrecy and cunning.

The instincts and emotions in relation with love of offspring or of the opposite sex are easily amenable to stimuli. Hence it is that children are such admirable curative agents in an asylum; hence the ad-

vantage of balls and concerts. Very often we have noticed in a class of patients, not uncommon in asylums, namely, young females in a state of amentia with dirty habits, and displaying an utter neglect of the person, that the first awakening of the dormant intellect has been due to the presentation of some trifling ornament of the hair or person, or to some other means by which the instinct for personal adornment has been awakened. This has proved the key note to the disordered chords of the imagination, and with the progress of this development from maniacal finery to rational neatness and good taste in dress, other faculties have been *pari passu* evolved.

The *intellectual sympathies* are very various; sometimes they are known from the previous habits and thoughts of the insane; sometimes they are accidentally discovered by the chance application of the appropriate stimulus. Of the latter there is an illustration in Crabbe's tale of Edward Shore.—“A harmless wretch beyond a cure;” he wanders abroad, and “that gentle maid whom once the youth had loved” pities him.

“Kindly she chides his boyish flights, while he
Will, for a moment, fixed and pensive be;
And as she trembling speaks, his lively eyes
Explore her looks, he listens to her sighs;
Charmed by her voice, th' harmonious sounds invade
His clouded mind, and for a time persuade;
Like a pleased infant, who has newly caught
From the maternal glance a gleam of thought;
He stands enrapt, the half-known voice to hear,
And starts, half conscious, at the falling tear.”

In developing a large class of this group of sympathies, the *imitative* instinct may be brought into beneficial operation. If a patient be placed amongst others actively engaged in various occupations, the desire will sooner or later arise to imitate them, and that employment will probably be selected which in days of mental health and vigour has been a favourite or habitual pursuit. Thus it is that industrial employments have so happy an influence on the insane; thus also we comprehend how music may arouse some long-forgotten thoughts and wake up mental life again. Perhaps country life and rural scenes exercise a secret beneficial influence rather than a visible effect, by their revival of those sympathies with nature which are rarely absent from the most uncongenial soul, but which are often the root of many noble and pleasant aspirations, and deeply felt by those predisposed to cerebral disease.

“There is a pleasure in the pathless woods,
There is a rapture on the lonely shore,
There is society where none intrudes
By the deep sea, and music in its roar.

The character of the emotions which these impressions excite, is proof

of their innate instinctive origin. It was in his "interviews" with nature that Byron experienced the pleasure he so well describes; he stole forth to them—

"To mingle with the Universe, and feel
What I can ne'er express, yet cannot all conceal."

If, while these soothing, gentle stimuli be presented to the mind, it be drawn at once from those of the cares of business, and the anxieties of worldly affairs, moral treatment is of essential advantage, and under these circumstances the asylum is emphatically and truly a retreat.

ART. II.—THE PLEA OF INSANITY IN CRIMINAL CASES.*

IN the History of Medical Jurisprudence, we find no chapter more perplexing than that which regards the plea of insanity in criminal cases. Our courts of justice, whether civil or criminal, demand that the evidence shall on all occasions, be clear, conclusive, and indisputable. But, unhappily, the human mind, when affected by disease, cannot in every case have its morbid features unveiled in open court. When the plea of insanity, therefore, is raised, there is often considerable difficulty in bringing forward a sufficient amount of demonstrative proof to satisfy the minds of unprofessional men, that the malady actually exists. The law presumes every man to be in his sound senses—and, therefore, responsible for his actions, until the contrary be shown. It is important for the interests of society, that the ends of justice should not be evaded by any fictitious plea. Hence the judges of the land always receive the plea of insanity with great caution; and lawyers accustomed to deal, for the most part, with demonstrative evidence, listen with impatience to medical testimony, which cannot be reduced to the same description of proof which they require to establish ordinary matters of fact. "We want *facts*," they exclaim, "not opinions;" but the truth is, the most self-evident facts of medical science can only be viewed through the medium of opinion, which tact, knowledge, and experience bring within the range of certainty. If a man be suffering under some obscure organic disease of the heart or lungs, the prognosis of the physician is the expression of his opinion: but at the same time, his opinion carries with it—provided he be regarded as an authority—as much weight as if he could demonstrate the certainty

* Croonian Lectures on Medical Testimony and Evidence in Cases of Lunacy. By Thomas Mayo, M.D., "Medical Times and Gazette," Nos. 180, 181, 182.

Unsoundness of Mind considered in Relation to the Question of Responsibility for Criminal Acts. By Samuel Knaggs. London: Churchill. 1854.

of the impending fact with mathematical precision. Why then should the opinions of those medical men who have made the study of insanity a speciality, not be received as valid evidence? If a man, through the negligence of a public servant, or a railway company, meet with a severe bodily injury, for which he seeks compensation in a court of justice, the most eminent physicians and surgeons are examined, and their opinions are received as valid evidence concerning the nature, extent, and consequences of the injuries inflicted. When, however, the plea of insanity is at issue, their evidence is very often received with marked disrespect;—nay, not very long ago, upon the trial of Oxford, the Lord Chief Justice Denman is reported to have said:—

“There might be cases in which medical evidence as to physical symptoms was of the utmost consequence; but as to moral insanity, he, for his own part, could not admit that medical men had at all more means of forming an opinion on a case, than were possessed by gentlemen accustomed to the affairs of life, and bringing to the subject a wide experience.”

This was equivalent to declaring that the opinions of Pinel, Esquirol, and Prichard, upon the difficult and perplexing subject of moral insanity, might any day be superseded by that of half-a-dozen members of the Carlton Club.

The directions which the learned judges have given to juries, in summing up the evidence of different state trials, indicate a fervent desire to lean to the side of humanity—but a great difficulty in determining what amount of insanity should render a man irresponsible for his actions. It is now almost inconceivable that so humane and enlightened a judge as Lord Chief Justice Hale, should, in drawing a distinction between total and partial insanity, have laid it down as the law that prisoners should be acquitted only in cases where a total and permanent want of reason was proved to exist. Under the head of total insanity, he distinguished between “that species which is fixed and permanent and lunacy which comes by periods or fits.” It would appear that the superstition of a lunatic becoming deranged through the influence of the moon—whence the ignorant derivation of the word lunatic—at that time prevailed in the minds even of learned men; hence, when the moon was declining into its third quarter, there was supposed to be a remission of the insane symptoms, followed by a lucid interval.

“Crimes committed,” says Judge Hale, “by lunatics, in such their distempers, are under the same judgment as those committed by men partially insane. The person who is absolutely mad for a day, killing a man in that distemper, is equally not guilty as if he were mad without intermission. But such persons as have their lucid intervals have usually in those intervals at least a competent use of reason; and

crimes committed by them are of the same nature, and punished in the same manner, as if they had no such defect."

Hence arose another difficulty. What constitutes a lucid interval? How are we to measure its completeness or its duration? There may be a cessation of symptoms; the lunatic may become tranquil, and appear to act reasonably: there may be a calm on the surface of the waters, while below, the current may be flowing as disturbed as ever, although unobserved. Who can determine whether this state of mental tranquillity be real, profound, and enduring, or only, perhaps, an apparent lull, a hush, an intermission of the storm? And, above all, how can any human sagacity penetrate, during this so-called lucid interval, into the secret depths of the mind, in order to ascertain whether the motives—the actual springs of action—are perfectly sane, or perverted by silent delusions? It is comparatively easy to establish the existence of insanity,—but very difficult, if indeed it be even possible, to discover the precise time when the mind casts off the cloud which over-shadowed it, and recovers its perfect serenity. In the case of Arnold, who was indicted at Kingston-upon-Thames, before Mr. Justice Tracey, in the year 1724, for felony, in wilfully shooting at and wounding Lord Onslow, it was clearly shown that the man had been habitually insane; but because he had formed a regular design, and prepared the proper means for carrying his object into execution, and had, upon the morning of the day he committed the offence, acted with apparent rationality—inasmuch as he was capable of distinguishing the sort of shot he wanted for the purpose, which was larger than the ordinary size—it was contended that the act was perpetrated during a lucid interval; and the jury found him guilty. His insanity was so clearly proved, that his brothers and sisters were, in the course of the trial, severely censured for not having taken care of him, and for not adopting means for his being cured. It was shown that he had not only been long subjected to aural and visual illusions, but he was habitually under a variety of delusions; imagining, among other extravagances, that Lord Onslow was in his bosom, constantly persecuting him, and preventing him from eating, drinking, sleeping, or being at rest. But notwithstanding all this, the lucid interval was presumed to have been established; and Mr. Justice Tracey, in charging the jury, laid it down as the law, that a man to be exempted from punishment under the plea of insanity, "must be a man that is totally deprived of his understanding and memory, and does not know what he is doing any more than an infant; than a brute, or a wild beast."*

* State Trials, vol. xvi. Trial of Edward Arnold for Shooting at Lord Onslow, p. 766.

Upon the trial of James Hadfield, for high treason, in the year 1800, the Hon. Thomas Erskine, afterwards the renowned Lord Chancellor, in a speech remarkable alike for force of reasoning and beauty of language, analyzed and exposed the fallacy of the views which had been propounded both by Chief Justice Hale, and Mr. Justice Tracey; indeed, no medico-legal authority, enlightened by the most recent views of mental pathology, could explain in more clear and precise terms the true psychological principles which should guide our diagnosis in such cases.

"If" (said Lord Erskine) "a total deprivation of memory was intended by these great lawyers to be taken in the literal sense of the word—if it was meant that to protect a man from punishment, he must be in such a state of prostrated intellect as not to know his name, nor his condition, nor his relation towards others—that if a husband, he should not know he was married; or if a father, could not remember he had children; nor know the road to his house or his property in it, then no such madness ever existed in this world."

He then proceeded to argue truly, that,

"It is idiocy alone which places a man in this helpless condition, where, from an original mal-organization there is the human frame alone, without the human capacity, and which indeed meets the very definition of Lord Hale himself, when referring to Fitzherbert, he says, 'Idiocy, or fatuity, *à nativitate vel dementia naturalis*, is such a one as described by Fitzherbert: who knows not how to tell twenty shillings, nor knows his own age, or who was his father.'" "But in all the cases which have filled Westminster Hall with the most complicated considerations," continued Mr. Erskine, "the lunatics and other insane persons who have been the subjects of them, have not only had memory, in my sense of the expression, *they have not only had the most perfect knowledge and recollection of all the relations they stood in towards others, and of the acts and circumstances of their lives, but have in general been remarkable for subtlety and acuteness.* Defects in their reasonings have seldom been traceable—the disease consisting in the delusive sources of thought; all their deductions within the scope of their malady being founded upon the immovable assumption of matters as *realities*, either without any foundation whatsoever, or so distorted and disfigured by fancy, as to be almost nearly the same thing as their creation. It is true, indeed, that in some—perhaps in many cases—the human mind is stormed in its citadel and laid prostrate under the stroke of phrensy; these unhappy sufferers, however, are not so much considered by physicians maniacs, as to be in a state of delirium, from fever. There, indeed, all the ideas are overwhelmed, for reason is not merely disturbed, but driven wholly from the seat. Such unhappy patients are unconscious, therefore, except at short intervals, even of external objects; or are at least wholly incapable of considering their relations. Such persons, and such persons alone (except idiots) are wholly deprived of their un-

derstanding, in the Attorney General's seeming sense of that expression. But these cases are not only extremely rare, but never can become the subjects of judicial difficulty. *In other cases reason is not driven from her seat, but distraction sits down upon it along with her, holds her trembling upon it, and frightens her from her propriety.*"*

This is truthfully, powerfully, and eloquently enforced; but still, persons who are not conversant with the phenomena of insanity, find it difficult to recognise that *état mixte*, which has been so well described by Moreau as a form of insanity, in which reason appears to co-exist with madness,† a state which Shakespeare has so admirably portrayed, both in Hamlet and in King Lear.

"O matter and impertinency mixed,
Reason in MADNESS."

Lear, Act iv., sc. vi.

That sagacious and enlightened lawyer, Erskine, unreservedly admitted that "*insane persons often reason with a subtlety which puts in the shade the ordinary conception of mankind.*" But he argued, although these conclusions may be just, and frequently performed—"The premises from which they reason, when within the range of their malady, are uniformly false—not false from any defect of knowledge or judgment, but because *a delusive image, the inseparable companion of real insanity, is thrust upon the subjugated understanding, incapable of resistance, because unconscious of attack.*" He therefore was led into the error of contending that "delusion," unaccompanied by frenzy or raving madness, should be regarded as the true test of insanity. This test was sanctioned by the authority of Sir John Nicholl, who in the case of *Dew v. Clark*, observed—"The true criterion, the true test of the absence or presence of insanity, I take to be the absence or presence of what, used in a certain sense, is comprisable in a single term, namely, delusion." Furthermore, the same learned judge added, "in the absence of anything in the nature of delusion, understood as above, the supposed lunatic is, in my judgment, not properly or essentially insane." The fallacy of this test was, however, afterwards conceded by Mr. Erskine himself, who, in defending a young woman indicted for murder, and acquitted on the ground of insanity, fully admitted that she did not labour under any delusion whatever. "The facts and circumstances which overpowered her understanding," he observes, "were strictly true: She was cast off by a Mr. Errington, with whom she had lived, and his marrying, or taking under his

* State Trials, vol. xxvii. Trial of James Hadfield for High Treason, p. 1313.

† Psychological Journal, Article "Mixed Insanity—Reason and Madness," vol. iii., p. 490.

protection, another woman, excited her grief and jealousy to such a pitch, that she could no longer control her actions. She accordingly, having procured a pistol, deliberately went to his house, where she shot him. She did not," he repeated, "act under a delusion that he had deserted her when he had not done so, but she took revenge upon him for his actual desertion of her." Every person who has made the study of insanity a speciality, now knows, that the disease may exist without any fixed or permanent delusion; although, when such delusions do exist, they are to be considered, according to their nature, as evidence of a state of mental derangement.

The next test of insanity—which was referred to at the trial of Arnold and of Bellingham, and which, indeed, has more frequently been appealed to than any other, from the time of Lord Chief Justice Hale down to the late decision of the twelve judges, in answer to the queries suggested by the trial of McNaughten,—affects the powers of moral discernment. Had the person, at the time of committing the offence, the knowledge of good and evil? was he capable of distinguishing right from wrong? In the case of Bellingham, the Attorney General (Sir Vicary Gibbs) declared, "upon the authority of the established law, in all times, which law has never been questioned, that although a man be incapable of conducting his own affairs, he may still be answerable for his criminal acts, if he possess a mind capable of distinguishing right from wrong." In his charge to the jury, Lord Mansfield—before whom the case was tried—reiterated the same view. "The single question," he said was, "whether, when he committed the offence charged upon him, he had sufficient understanding to distinguish good from evil, right from wrong; and that murder was a crime, not only against the law of God, but against the law of the country." In his work on Crimes and Misdemeanours, Russell adopted this doctrine; and Ray, in his Medical Jurisprudence of Insanity, points to that fact as indicating the little progress made in this department of science. "This opinion," he observes, "was delivered scarcely a dozen years after the absurdity of its principles had been so happily exposed, in a few words, by Mr. Erskine, on the trial of Hadfield. What a comment on the progress of improvement in the Medical Jurisprudence of Insanity!"* It is curious to find that, notwithstanding the light that has been thrown upon different species of insanity—especially upon moral insanity, homicidal insanity, and impulsive—by the highest authorities in his department of medical science, that the twelve judges should still have adhered to what we should consider an obsolete dogma. They declare that "the jury ought, in all cases, to be told

* A Treatise on the Medical Jurisprudence of Insanity. By J. Ray, M.D. With an Introductory Essay, by D. Spellan, M.D. London: 1839. Pp. 29.

that every man should be considered of sane mind until the contrary be clearly proved in evidence. That before a plea of insanity should be allowed, undoubted evidence ought to be adduced that the accused was of unsound mind, and that, at the time he committed the act, he was not conscious of right or wrong. Every person was supposed to know what the law was, and therefore nothing could justify a wrong act, except it was clearly proved that the party did not know right from wrong. If that was not satisfactorily proved, the accused was liable to punishment. If the delusion under which a person laboured were only partial, the party accused was equally liable with a person of sane mind." Such is the present state of the law; yet there is no fact better established than that insane persons, criminal lunatics in particular, are frequently perfectly conscious of the distinction between good and evil, right and wrong, and even the consequences which will attend their committing certain acts; but, notwithstanding all this, they are unable, from their state of mental infirmity or aberration, to control their morbid propensities.

This brief retrospect, showing how improgressive are the principles which govern our learned judges in dealing with the plea of insanity in criminal cases, and what little sympathy and coincidence exists between legal and medical views on the subject, we have thought a befitting introduction to our notice of Dr. Mayo's Cronian Lectures on Medical Testimony and Evidence in cases of Lunacy, and a *brochure* recently published by Mr. Knaggs, entitled "Unsoundness of Mind considered in Relation to the Question of Responsibility for Criminal Acts." The report of the lectures of Dr. Mayo, in the medical journal before us, we presume to be considerably curtailed; they are three in number. In the first, he discusses the subject of insanity in its relation to medical proof under its essential element, delirium, as indicated by inconsecutive, incoherent trains of thought, and by certain delusions over which the patient has no control; in the second, he dwells upon the destructive orgasm or tendency in its relation to moral insanity especially; and in the third, he considers idiocy in its relation to civil actions, and the distinctions which may be drawn between unsoundness of mind and insanity. The work of Mr. Knagg is condensed into seven chapters.—I. The Introduction.—II. On Mind.—III. Sound and Unsound.—IV. Punishment in Reference to Crime and Lunacy.—V. Unsound Mind as a Responsible Condition.—VI. Unsound Mind as an Irresponsible Condition.—VII. The concluding Chapter containing "practical suggestions." Upon the *questio vexata*, what should be esteemed the true test of insanity as regards the responsibility or non-responsibility of the criminal lunatic, neither author appears able to lay down any practical rule for our guidance. Dr. Mayo, indeed,

suggests that insane persons may be divided into two classes, the responsible and the irresponsible, and he suggests that "the responsible insane should undergo some lower degree of punishment than that inflicted on similar delinquents being of unsound mind." But a man, it is obvious, must, in the eye of the law, be held either sane or insane; if sane, the usual sentence upon conviction is, of course, passed: but if insane, why should the unfortunate person be subjected to any degree of secondary punishment? "The position of many persons under capital charges," continues Dr. Mayo, "is at present anomalous. They are acquitted in defiance of the law, as laid down by the judges respecting McNaughten's case, because the punishment appertaining to the offence would be too severe; and then, instead of being consigned to confinement in a gaol as a secondary punishment, they are consigned to it in an asylum as a plea simply of detention. This becomes a scene of severe virtual punishment to some of them; of gratification to vanity, and idleness to others; those, meanwhile, to whom it is a grievance, as they do not regard it in the light of a punishment, derive from it none of the preventive effects of punishment or future conduct; while the public, for the same reason, find it equally unproductive of good, as an example to persons of actually diseased mind, or to that large class of persons who are drifting into disease under uncontrolled eccentricity." We confess it is new to us that, in any case, the plea of insanity has ever been admitted because "the punishment appertaining to any particular offence would be too severe;" and we certainly should object to asylums, which ought to be regarded as hospitals for the cure of mental disease, being converted into supernumerary gaols; in all the cases that ever have occurred, when the plea of insanity has been raised, the only question for the judge and jury to decide, has been whether the accused was sane or insane; responsible or irresponsible for his actions. And the whole difficulty hinges upon how this is to be determined? It is proposed by Dr. Mayo, that the alleged criminal lunatic should be examined as to his state of mind in the presence of the judge and jury, which would, he assumes, "facilitate an understanding between law and medicine in the most Protean form the most untractable subject of investigation which is brought before either: and in doing this, give full weight and value to the deductive reasoning of lawyers, while we support the claim of the medical profession to aid them in the work of decision or inquiry." In criminal cases, a grand jury has no authority by law to ignore a bill of murder on the ground of insanity, but if a man be found insane upon arraignment, he is not tried, because he is incapable of adducing evidence in self-defence; if, however, the trial proceeds, counsel does take advantage of the presence of the prisoner at the bar, to point out, as Dr. Mayo

suggests, any personal peculiarity or appearance that may support the plea of insanity. Thus, upon the trial of Hadfield, the attention of the jury was called to the wounds of the head which he had received while serving in the army. "When the court," said Mr. Erskine, "put the prisoner under my protection, I thought it my duty to bring Mr. Cline to inspect him in Newgate; and it will appear by the evidence of that excellent and conscientious person, who is known to be one of the first anatomists in the world, that from this wound one of two things must have happened; either that, by the immediate operation of surgery, the displaced part of the skull must have been taken away, or been forced inward on the brain. The second stroke also speaks for itself; you may now see its effects;" here Mr. Erskine placed his hand on the head of the prisoner, showing to the court the injuries he described, and then added, "he was cut across all the nerves which give sensibility and animation to the body, and his head hung down almost dissevered, until, by the aid of surgery, it was placed in the position you now see it; but thus almost destroyed, he still recollected his duty, and continued to maintain the glory of his country, when a sword divided the membrane of the neck where it terminates in the head; yet he still kept his place, though his helmet had been thrown off by the blow which I secondly described, when, by another sword, he was cut into the very brain—you may now see it uncovered." The learned counsel added, "*There* the disease is, from its very nature, incurable; and so when a man like the prisoner has become insane from violence to the brain, which permanently affects its structure, however such a man may appear occasionally to others, his disease is immovable; and if the prisoner, therefore, were to live a thousand years, he never could recover from the consequence of that day." There can be no doubt that the presence of the unfortunate man in the midst of this scene, must have strikingly affected the whole court; but we are not prepared to affirm that it would have been expedient for him to have been personally examined and cross-questioned at the bar by any medical men. This practice, if introduced into our courts, whether civil or criminal, would lead to very painful exhibitions; and the jury, being unacquainted professionally with the phenomena of insanity, would be little able to appreciate the value of the evidence. A sane man ingeniously cross-examined by medical men, assuming the functions of barristers, might be made to appear in open court insane enough; and, on the contrary, a lunatic may summon up sufficient energy of mind to answer questions with marvellous lucidity, whereby the jury again would be misled. But the most fatal objection to adopting the suggestion of Dr. Mayo is, that no man upon trial for his life is bound to convict himself: the humanity of the English law protects him as

much as possible from being a witness, under any criminal indictment, against himself. Far more humane and efficient is the present system. The physician who has made the study of insanity a speciality, and who has attained eminence in this branch of the profession, is desired to visit the alleged lunatic. This he may do repeatedly; and when he has satisfied himself as to his state of mind, his evidence is delivered in court. This is, in our estimation, a far better and more satisfactory mode of proceeding than the one suggested by Dr. Mayo; we have more frequent opportunities of testing the sanity of the prisoner, and discharging more satisfactorily to our own mind one of the gravest responsibilities which can devolve upon us.

In the lectures before us, Dr. Mayo tells us that he has accepted the terms which are laid down by Acts of Parliament as expressing the conditions on which abnormal states of mind are imputable; and with respect to their meaning, while he does not consider them virtually synonymous, or as having the same force, he has endeavoured to adopt that which the law may be presumed to intend, and which expresses real not verbal differences. It is to be regretted, as Dr. Mayo appears himself to intimate, that he did not take a larger basis for his division of insanity, and one more consonant with what he designates "the entire pathology of the mind;" he would not, in that case, have repudiated, as he appears to do, the forms of "impulsive," "instinctive," and "moral insanity."

"With respect to eccentricity and atrocity of vice," says Dr. Mayo, "I may observe, that the theory of either moral or impulsive insanity is liable, for anything that Dr. Prichard has suggested, to occasion the sudden outbreaks of the brutal character—a character under rapid development at present in the country—to find refuge under this plea. Such was the application of it which some years ago protected the honourable Mr. Tucket from the penal consequences of a great crime. That gentleman put to death by a pistol-shot the marker of a shooting gallery. The act was sudden, and there was no appearance of motive; but it was not performed under any semblance of delirium. Mr. Tucket was eccentric; and he was *blazé*. He fancied that he desired to be hanged: at the gallows he would probably have thought differently, and he was reckless and brutal enough to give himself a chance of this fate at the expense of the life of a fellow-creature. I have noticed him since in the criminal department of Bethlem, *insouciant*, and indifferent enough, but certainly not insane in any sense of the word that would not entirely disintegrate its meaning; neither, when we proceed to consider the sense which the law intends to give to the expression of the certificate, 'unsoundness,' shall we find this epithet at all more appropriate to Mr. Tucket's case, which was simply one of brutal recklessness."

Now, with great deference to Dr. Mayo, whose opinions we respect,

it appears to us that no man in his sound senses would commit a murder for the sake of being hanged; and from our recollection of this case, it came clearly under the head of homicidal and impulsive mania. There may have existed in the mind of this unfortunate person a desire to commit murder, and a desire to be hanged; for it is notorious that homicidal is very frequently, if not generally, complicated with suicidal mania. Many such cases are on record. We also, contrary to the opinion of Dr. Mayo, believe that the court was right in deciding that Captain Johnson, who, cruelly wounded and murdered, upon several successive days, many of his ship's crew, was also insane when he committed those outrageous acts; and it seems to us to militate as an argument against Dr. Mayo's suggestion of the alleged lunatic being examined in the presence of the judge and jury, that if, as he conjectures, such a course had been adopted in the case of this man, instead of being treated as a lunatic, he would not have escaped punishment, in other words, he would have been found guilty and hanged; but no "shades of psychological distinctions" can, in our opinion, justify the infliction even of secondary punishment upon a lunatic. He must be treated as a person who is either sane or insane, as being morally responsible for his actions or morally irresponsible: there can be no intermediate condition. It appears that Dr. Mayo would not allow persons guilty, like Tucket and Johnson, of "brutal recklessness" to escape under the plea of impulsive or moral insanity; and he suggests, "whether a state of the human mind is not conceivable which shall be distinguished entirely from insanity as implying no delirium,—from unsoundness as implying no incapacity for the conduct of person and property,—and which shall bear the same relation to the moral sense as idiocy bears to the intellectual sense, involving an entire absence or imperfect development of the former, as idiocy does of the latter? A complete practical division of, or system of abnormal mind, would comprehend such a head, and the distinction would involve none of the mischief which I have imputed to the doctrines of moral insanity. That mischief is contained in one short expression—impunity afforded to crime. No such impunity is implied in the hypothesis which avowedly represents the abnormal state as a mode of wickedness consisting in the *non-development or absence of the moral sense*. For, from being thus constituted to remove the fear of punishment, would be to denude him of the sole preventive of crime afforded him by Providence." This hypothesis is put very ingeniously by Dr. Mayo; but may it not fairly be argued, that to punish a man for a connatural defect of mind would be as unjust as it would be to punish an idiot for being incapable of using the reflective faculties? If there be, in the original constitution of the mind, an entire absence of so important

an element as the moral sense, which is the true arbitrator between right and wrong, and the basis, according to many ethical writers, of all good and virtuous actions, such a person is as much to be pitied as any congenital cripple, who might as well be punished for not using limbs which Nature has, contrary to her usual custom, denied to him. It is clear that a person so afflicted ought to be protected; for this defect in his mental organization takes from him the power of distinguishing right from wrong, and reasoning correctly on the consequences of his actions. Hence he may become predisposed to commit those motiveless and impulsive outrages which Pinel, Esquirol, and Prichard have very properly described as arising from that species of the disease designated moral insanity. We have not time to pursue this interesting subject further; the existence or non-existence of a moral sense, as a distinct and original faculty of the human mind, would lead to a disquisition upon the views of Cudworth, Locke, Hutcheson, Price, and other ethical authors, which would far exceed our limits. Suffice to say, that if we recognise, as Dr. Mayo seems to do, the existence of a moral sense in the natural constitution of the human mind, its non-development or absence would subject the mind to a state of irrationality which has a strong claim upon our sympathies, and which should demand for a person so afflicted the same consideration as if he became insane from any other cause.

In Dr. Mayo's third lecture, he discusses the meaning of the expression, "unsoundness of mind," as used in our medical certificates of lunacy, in contradistinction to insanity and idiocy. "Unsoundness of Mind," he tells us, "is the term which applies to a person of whom neither insane delusion, nor inconsecutiveness, nor incoherency can be predicated—but who may nevertheless be brought before a physician as requiring precautions in reference to the management of his property and person. The man in question is not in his dotage—he talks with sufficient fluency and without anything remarkable in the sequence of his thoughts. But on every subject of business his mind goes into a state of confusion, of which he is not conscious. He is unable to appreciate value, and though fond of property, will purchase and part with it at absurd prices. He can believe anything that is told him, however improbable, and if he takes a dislike can invent or believe any fiction that falls in with his feelings of resentment. I may add, that his conversation being on the whole continuous and coherent, there is never flighty character in it, and often some deficiency of articulation." We recognise readily the truthfulness of this portrait, which introduces to us a class of patients whom it is extremely difficult to deal with—requiring, as they do, protection rather than confinement; a species of surveillance which shall not remind them that they are

considered insane persons—but which shall at the same time be sufficiently stringent to prevent their injuring themselves or others. The first example which Dr. Mayo has selected to illustrate this form of insanity—is that that of the late Mrs. Cumming—but as we propose at some future time discussing at some length this important case in all its medico-psychological relations, we abstain for the present making any remarks upon the interpretation which Dr. Mayo gives to the incidents he has referred to.

The same theoretical difficulties which appear to have occurred to Dr. Mayo in the course of his Croonian Lectures, have obviously embarrassed Mr. Knagg's speculations, who has, we fear, not succeeded in throwing any new light on the subject—nor could this be expected, as he appears to have argued only within the same circle as his predecessors. He, too, refers to the cases of Hadfield, McNaughten, Laurence, Touchet, &c., and finds himself equally at a loss to determine what test should be adopted to justify a criminal lunatic being released from responsibility. The decision of the twelve Judges—that “nothing could justify a wrong act, except it was clearly proved that the party did not know wright from wrong,” Mr. Knaggs repudiates. “A full consciousness,” he observes, “of the illegality of wrongfulness of the act may exist in a man's mind, and yet he may be fairly acquitted on the ground of insanity; thus the incendiary Martin admitted, that he knew he was doing wrong according to the law of man, when he set fire to York Cathedral; he was conscious that the act was illegal, but said he had the command of God to do it.” Moreover, “not unfrequently do we find existing in the lunatic criminal, not only a consciousness of right and wrong, but even a knowledge of the consequences of the act; and strange to say, perhaps this latter perception constitutes the only motive for the commission of the deed. Thus, in the case of Hadfield, he knew that in firing at the king he was doing what was contrary to law, and that the punishment of death was attached to the crime of assassination, but the motive for the crime was that he might be put to death by others; he would not take his own life.” Many years ago, we ourselves went over this ground, and as a proof, that in many cases of insanity, the patient appears perfectly competent to perform a correct process of reasoning, and is fully aware, not only of the distinction between right and wrong, but of his legal responsibility; we cited the two following anecdotes:—An intriguing, unruly, vicious madman, was detected with a piece of iron, which he had contrived to shape like a dagger; into this iron he firmly fixed a handle. The weapon was taken away from him. He immediately became excessively abusive, and was placed under restraint. After this, he was more violent, and uttered the most revolting imprecations. In a fit of fury, he exclaimed

to the attendant, "I'll murder you yet; I am a madman, and they cannot hang me for it." When Martin set fire to York Minster, a conversation took place among the inmates of a neighbouring lunatic asylum relating to this circumstance. The question discussed was whether Martin would suffer the extreme penalty of the law for the crime. Various were the opinions expressed. In the midst of the conversation, one patient, as mad as the rest, exclaimed "He (Martin) will not be hanged,—of course he will escape." For what reason?" asked several voices. "*They cannot hang him,*" replied the lunatic, "*because he is mad—he is one of ourselves.*"* Any person who has had the charge of insane patients, and lived among them, whether in a public or private asylum, will bear testimony to many of them conducting themselves very rationally; nay, they will often converse upon the subject of their own malady, and ridicule their own insane actions. Not one of his tests, therefore, referred to at the commencement of this article, and propounded by the most learned of our judges, has been found to hold good; indeed it is well observed by Dr. Mayo, in one of the lectures before us, that there is a remarkable discrepancy between the theory and practice of the law. "The position of many persons under capital charges," observes the doctor, "is at present anomalous; they are even acquitted in defiance of the law." Thus it would appear—and we fully concur with Mr. Knaggs in this remark—"That any attempt by fixed rules, either legal or medical, to distinguish between those mental conditions which should be accountable, and those which should not, must either fail in its application or be productive of evil." With this admission, we are somewhat surprised to find Mr. Knaggs suggest a new test, which is quite as unavailable as any other. "The best test of the responsibility of the criminal on the plea of insanity is, not whether he be conscious of right and wrong,—or have a knowledge of the consequences of his act,—but whether he be capable of controlling his actions—not alone in homicidal cases, but wherever the plea is raised."—(pp. 69—77). Were it possible to solve this problem, there would be an end of the difficulty; but Mr. Knaggs himself admits that the crime may be proved; but—we quote his own words,—“We have no means of ascertaining the actual state of mind of the person at the time of his committing the act.”—(p. 76.) What then becomes of the proposed test?

We have compared attentively Chapter IV., entitled, "Unsound Mind, as a Responsible Condition," with Chapter V. "Unsound Mind as an Irresponsible Condition." But we confess we cannot discover

* The Plea of Insanity in Criminal Cases. By Forbes Winslow, M.D, London: 1843.

any criterion for determining the amount of mental unsoundness which shall place one criminal lunatic in a responsible—another in an irresponsible condition. We return, as we have just observed in reference to Dr. Mayo's proposal for inflicting secondary punishments in such cases, to the pith of the question. Was the man arraigned upon a criminal charge, when he committed the alleged offence, in a sound or unsound state of mind? Was he sane or insane? We cannot, upon a truly conjectural theory, allow assumed "shades of psychological distinctions"—as Dr. Mayo expresses it—to exculpate one lunatic and exonerate another. Who shall presume to determine where, in a mind confessedly unsound, responsibility shall end, and irresponsibility begin? We may invent supposititious cases in support of any hypothesis, but when we come to deal with the stern realities which are brought forward in our criminal courts, when we are put into the witness-box as physicians, conversant with the general and special phenomena of insanity, and are called upon to state the views we entertain and the conclusions we have arrived at from experience, these speculative and shadowy distinctions disappear and become merged in the general fact, that when the accused committed the crime labelled against him he was in a state of unsound mind. This to us is sufficient; we cannot probe deeper. When the life of a human being is at stake we will not split straws respecting the abnormal conditions of mental faculties, the specific range of which we know little of in health, and less of in disease. We, therefore, after carefully reviewing Mr. Knagg's arguments, return to the point from which we started, which may be thus expressed:—No medico-psychological rule or formula can be laid down for determining when a man, already of unsound mind, loses the power of controlling his actions: urged by an insane impulse, he may at any moment, like Touchet or McNaughten, commit an outrage; but it is impossible for us to determine at what precise moment the insane impulse either took possession of his mind or became irresistible; we can adjudicate only upon overt acts. The all-seeing eye of Heaven can alone penetrate into the secrets of the human heart. We cannot watch the course of a man's silent thoughts, nor can we weigh the evil passions which may be slumbering in his breast; but if, as medical jurists, we believe him to be of unsound mind, assuredly the plea of his insanity should be allowed to prevail in his defence.

We know from our own experience how perplexing it is in some cases to draw a satisfactory diagnosis, and how careful we ought to be in weighing every collateral circumstance which can throw any light upon the motives which may have actuated a criminal lunatic. So conscious, indeed, does Mr. Knaggs appear to be of the difficulty of

determining the question of responsibility or irresponsibility, that in the chapter of "Practical Suggestions," he proposes that the opinion of a single physician, however eminent in the profession, should not be relied upon; but that a jury of medical practitioners, selected from amongst those who have had experience in the observation or treatment of the insane, should be empannelled, and that upon their verdict the fate of the prisoner should depend. But this verdict, continues Mr. Knaggs, should not be founded upon the fact that the prisoner is of unsound mind, "but upon the condition of a sufficient degree of unsoundness in their judgment being present to constitute a plea as to irresponsibility. Such a jury should consist of three or more, with a foreman, also medical, to collect their verdict; then supposing, in the course of an ordinary trial, that the plea of insanity was raised, the decision upon this ground would rest with the empannelled medical jury, and in the event of their rejecting the plea upon hearing the evidence, the common jury would proceed as usual to their verdict; but if the panel was of opinion that the evidence of unsoundness was sufficient to constitute irresponsibility, the decision should be held to be final, and a verdict of 'not guilty,' on the ground of insanity, recorded by the judge."—(p. 84.) This appears to be a very ingenious suggestion, albeit, somewhat utopian; but if one experienced physician cannot solve the psychological problem upon which their verdict is to depend, we are afraid the wisdom of three would be equally unsuccessful: nay, we cannot understand by what *scale* these *degrees* of mental unsoundness are to be measured; therefore we should infinitely prefer the verdict, resting as it at present does, upon the general fact,—whether the prisoner was or was not of unsound mind or insane when he committed the act? This is the question for the judge and the jury to determine; and instead of a *medical* jury being empannelled to express their opinion in the form of a verdict—the plan at present adopted—that of calling in the evidence of the most eminent men in this department of the profession is by far the best. There may occasionally be an unseemly difference and collision of opinions among specialists, but even this tends to the elucidation of the actual truth; and the prisoner, if insane, has an advantage which he would not possess were his fate dependent upon the verdict of a small compact jury of three or four medical men. It is clearly more just—more for the benefit of the prisoner, and more satisfactory to the public—that the opinions of many physicians of eminence should be received in evidence.

We must, however, now conclude. The Croonian Lectures, by Dr. Mayo, will, we hope, be published in a more complete form; we have selected passages for criticism rather than for praise, or we might have given many interesting extracts which would show that these

lectures will be a valuable contribution to the literature of medical jurisprudence. Insanity ever has, and ever will be a perplexing subject even to the most profound psychologists. The most eminent authors have failed to give any satisfactory definition of the disease. It is a popular notion that every man is a little mad, and we confess we have been much amused in reading the following description of the great lexicographer, Dr. Johnson, whose eccentricities grouped together are exceedingly striking. The portrait is admirably drawn:—

“There was” (says Mr. Knaggs) “an old man well known in London during the last century, who was of an ungainly appearance, and subject to occasional attacks of hereditary melancholy; so inconsistent was he in his habits that sometimes he practised great abstemiousness, and at other times devoured huge meals with brutish slovenliness and voracity; sometimes he would persist in drinking nothing stronger than water, but occasionally drank wine by tumblers full: his income was far from large, and not of a certain amount, yet he kept a set of old men and women about his house, whose bickerings and disagreements now and then drove him out of doors; he was in general very loquacious, but had been known to sit in company and drink a dozen cups of tea without speaking a syllable; when not engaged discoursing, it was his custom to keep muttering to himself; in walking, he performed strange gesticulations with his limbs, and would not go in at a door unless he could effect his entry in a certain preconceived number of steps, and so as to introduce himself on a particular foot, turning back and recommencing until he succeeded as he desired; there was a row of posts near his house which he would not pass without touching singly, and if he had omitted one in the series, he retraced his steps to remedy the neglect; he hoarded up orange skins for some mysterious purpose which he would never divulge; he suffered remorse of conscience for having taken milk in his coffee on Good Friday; he believed in ghosts and went ghost hunting in Cock-lane; and he maintained he had heard his mother calling upon him by name in the other world. Yet Dr. Johnson was so far from insane, that his judgment commanded respect and admiration everywhere, and, by the common consent of eminent contemporaries, he was the most vigorous thinker and the greatest sage of his time.” (p. 46.)

We regret we have not space for further extracts. We have found Mr. Knaggs’s work extremely interesting; every page may be taken as a text for a running commentary, and ere long we may have occasion again to return to it.

ON THE WEIGHT AND SPECIFIC GRAVITY OF THE BRAIN IN INSANITY.

BY DAVID SKAE, M.D., PHYSICIAN TO ROYAL EDINBURGH LUNATIC ASYLUM.

Dr. SKAE commenced by remarking on the obscurity in which the pathology of insanity was involved, notwithstanding the careful examinations of the brain in those affected with the disease which have been carried on for many years in our principal asylums.

Such morbid appearances as thickening and opacity of the arachnoid, serous effusions into the subarachnoid tissue, arachnoid sac and ventricles, increased or diminished vascularity of brain and membranes, were found very frequently in persons dying of other diseases and without any mental affection; while, on the other hand, cases were not unfrequently met with of patients who had exhibited during life, for many months or even years, all the symptoms of raving madness, and in whose brains the appearances described above were altogether wanting, and nothing abnormal could be detected. A solitary exception to this general statement had been adduced in the special form of disease called general paralysis, where a peculiar softening of the grey matter was found, not indicated by any change appreciable to the eye, but by layers of the grey matter stripping off readily with the membranes, to which it often adhered; by the readiness with which it was broken up by a stream of water; and by an increase in the size of the nucleated cells of which the grey matter is principally composed. It must be inferred, therefore, that such appearances, though frequent concomitants, did not constitute the essential pathological conditions of the disease. Indeed, the analogy of the symptoms to those produced by poisons which are known to enter the blood, the suddenness of the invasion in some cases, and the suddenness of the cure in others—even occasionally of long standing; the remarkable remissions, and the temporary restoration to perfect sanity, might well lead us to doubt whether morbid changes in the structure of the brain would ever be discovered, and to look upon insanity as a disease of the blood, or due to some peculiar orgasm of the nervous centres not to be recognised after death.

It had occurred to Dr. Skae some years ago, that it might be useful to collect the weights of the brain, cerebrum and cerebellum; to measure the depth of the grey matter; to endeavour to determine the degree of hardness or softness of the cerebral substance; to ascertain by what length of a column of water it could be broken up; and, more lately, to take the specific gravity of the grey and white substance of different parts of the brain. In this communication, however, he would confine himself to the weight and specific gravity of the brain, leaving the other items of his investigation till such time as his data accumulated, to enable him to present them in a satisfactory form.

His observations on the weights of the brain were compared, in elaborate tables, with the data collected in the Royal Infirmary of

Edinburgh, by the late Dr. John Reid and Dr. Peacock, and his experiments on the specific gravity with those published by Dr. Sankey in the *Med.-Chirurg. Rev.* for January 1853, and made in the Royal London Fever Hospital. The weights used were avoirdupois.

Weights.—One hundred and seventy-two cases were examined, of whom eighty-three were males and eighty-nine females. In only one instance did the encephalon exceed 60 ounces in the insane, while in several of the sane it amounted to 62 ounces and upwards; the heaviest brain in the one series being 60 oz. 8 dr., and the heaviest in the other being 62 oz. 12 dr. With two exceptions, the superiority in weight was among the brains of the sane in each of the quinquennial or decennial periods into which they were classified. Dr. S. could not venture to say whether this justified the inference that persons having large brains were less frequently the subjects of mental derangement than others, but the fact was a striking one when contrasted with the results derived from a comparison of the average weight of the entire number of cases, where it appeared that the average weight was increased in persons dying insane. The average weight in the insane, from fifteen to ninety years of age, being 50 oz. 4 dr., and in the sane 49 oz. 14 dr. The same results were derived from a comparison of the weights of the brains of females. On taking the average of all the cases, the weight of the brain in the insane was 44 oz. 7 dr., and in the sane 44 oz. 5 dr. The presumption that the absolute weight of the brain is increased in the insane was greatly strengthened by the fact, that in many cases of insanity the absolute size of the brain must be materially diminished by the large quantity of serous effusion generally met with. The cerebellum, however, appeared to be the chief agent in determining this increase in weight, for on comparing the weights of the cerebra in the two series of cases the difference was inconsiderable, and indeed, in the case of the females, in favour of the sane; while on comparing the weight of the cerebellum with the pons and medulla in the two classes, it would be found that there is almost a uniform preponderance in the weights of those of the insane. The average weight in all the cases of the insane males exceeds that of the sane by four drachms, and the females by three drachms. The same fact was very clearly brought out on comparing the ratio between the cerebellum (with the pons and medulla) and the cerebrum at the different ages distinguished in the tables.

On arranging the weights of the brain according to the form of disease under which the patients laboured, and taking the average, the diseases stood in the following series: mania, monomania, dementia, and general paralysis. The weight being greatest in mania, and least in general paralysis. On comparing the average weights of the cerebella, however, the series stands thus: general paralysis, mania, monomania, and dementia; the cases of general paralysis presenting the highest average. The increase of the relative weight of the cerebellum to the cerebrum appearing to bear a constant relation to the form of the disease, and to be greatest in the more protracted and gravest cases. In acute mania, a disease of comparatively short duration, there was the smallest amount of increase in the relative weight

of the cerebellum, and in general paralysis the greatest increase took place.

Specific Gravity.—The elaborate tables exhibited went to show that the specific gravity in the cases of insanity was almost uniformly higher, and this applied to both the grey and white matters. As regards the white matter, the mean of all the cases was 1041.1 in the sane, and 1042.4 in the insane, showing an increase in the specific gravity in cases of insanity. These results were corroborative of those obtained by Dr. Sankey, at the London Fever Hospital, who found that in all the cases complicated with cerebral symptoms of a grave character preceding death, the specific gravity was high, the average being 1043.

Dr. Skae found that in most of those cases where the specific gravity of the grey matter was considerably below the mean, the patients had died of phthisis, and in other instances of exhaustion occurring at an advanced age. In a few exceptional cases, either the symptoms immediately preceding death were of a grave character, or the morbid appearances found in the membranes indicated chronic inflammatory action.

The number of observations with regard to the cerebellum was too few to warrant more than a presumption that the specific gravity of the cerebellum was higher than that of the cerebrum.

In the different forms of mental disease, and taking the average in all the cases of each kind, the lowest specific gravity of the grey matter occurred in cases of dementia, where, however, it was still .003 above the average in the sane. The next highest specific gravity occurred in cases of melancholia and monomania; the next in general paralysis; the next in mania; and the highest in epilepsy. Of the white matter, the lowest average specific gravity occurred in cases of mania; the next in dementia; the next highest in general paralysis; the next in monomania; and the highest in epilepsy.

Dr. Skae apologized for the meagreness of the facts presented to the Society, but they were all which he had been able to collect in the hospital under his charge. The inferences from them appeared to him of sufficient interest to warrant the hope that more extended observations of a similar kind might lead to satisfactory and important deductions.

In answer to queries from the President and Dr. Bennett, Dr. Skae said that a common scalpel was the instrument employed to separate the white from the grey matter; and that the specific gravities were obtained according to the plan proposed by Dr. Sankey, viz., by means of saline solutions of different strengths. The precaution must be taken to remove the piece of brain as soon as possible, and not to allow it to soak in the fluid.—(*Communicated to the Medico-Chirurgical Society of Edinburgh.*)

LETTSONIAN LECTURES.

No. II.

ON THE MEDICAL TREATMENT OF INSANITY.

Delivered before the Medical Society of London, April 7, 1852.

By FORBES WINSLOW, M.D., D.C.L.

THE purport of this lecture is the Medical Treatment of Insanity. It may be surmised that I have selected this subject with the view of submitting for your consideration, and through you to the profession, the particulars of a mode of treating the diversified morbid affections of the mind, original in its conception, *invariably* successful in its results, and based upon my own peculiar views as to the pathology of the disease. I am anxious, *in limine*, to disabuse your minds of these ideas. I lay no claim to any *exclusive* or *specific* mode of treating insanity. I possess no panacea, I have discovered no infallible medicine, no elixir, no drug that will

“Purge the mind of its thick-coming fancies,”

disperse the creations of the morbid imagination, restore the intellect to its just equilibrium, invigorate the judgment, give impetus and power to the paralysed volition, overpower the suicidal and homicidal impulse, elevate the depressed emotions, revivify the lost affections, or

“Chase away the furrow'd lines of anxious thought.”

I should indeed be thankful if it were in my power to recommend to my professional brethren, any *specific* and *uniformly* efficacious course of medical treatment, likely to be followed by such happy results. Other motives and different feelings have influenced me in bringing this important and much-neglected matter before the profession, and have induced me to make it one of the “Lettsomian Lectures,” which I have the privilege of delivering before this Society.

In considering the present aspects of the medical profession, I have been impressed by the conviction, that, as philosophers in

search of truth, we have hitherto paid too little attention to the study of the science of therapeutics. Extraordinary talents, enlarged capacities, high attainments, profound knowledge, great power of continuous and laborious scientific investigation, indomitable and unflagging industry, united to habits of close and accurate reasoning, are devotedly and zealously engaged in the study of the different branches of our noble science. I ask, whether the great, the original, and truth-loving minds among us have investigated, in a manner proportionate to its vast importance, that section of our art which specially and exclusively relates to the *modus operandi* of medicines, and their therapeutic influence in the *actual cure of disease*? I feel reluctant to breathe a word, or to utter a syllable, which could in the slightest degree be supposed to convey the impression that I undervalued and underestimated those essential and interesting departments of the science of medicine, to the investigation of which so many highly-gifted men are devoting their talents and knowledge. The microscope has done much to enlarge the boundaries of science; it is an invaluable instrument in the hands of the scientific, experienced, and cautious philosopher, and the insight which it has afforded, and the light which it has reflected upon the minute anatomy of tissue, and into the nature of organic and pathological products and elements, have undoubtedly advanced considerably the science which we cultivate. The results so obtained have led to, and will ultimately be productive of, most important practical advantages. I say so much in this stage of my inquiry, to guard myself against the imputation of thinking lightly of these minute inquiries into the intimate nature of organic structure. I would not say a word to discourage the commendable zeal, industry, and patience of the microscopist, who toils

“From night to morn, from morn to dewy eve,”

in investigating the phenomena of matter, and who applies well-ascertained data to assist him in the elucidation of that mysterious and subtle principle which gives motion, animation, and intelligence to the grosser particles of our material organization. Admitting the great utility of the microscope, I would, placing my interrogatory in a suggestive form, ask, whether we have not, in these profound, intellectual, and necessary investigations, occasionally overlooked the great and ostensible vocation of the

physician? The erudite anatomist—the learned physiologist—the accurate stethoscopist—the profound analytical chemist—the zealous microscopist, capable of accurately delineating the minute anatomy of tissue, or the physical character, weight, and quality of each essential organic element constituting its structure—will not, without the patient study of the phenomena of disease, and careful investigation of the *modus operandi* of the agents of the materia medica in certain morbid conditions of the system, make either a good or a successful physician. Have we not neglected the science of therapeutics? Have we devoted a sufficient degree of attention to the study of the specific action of medicine, under given conditions of bodily disease? Have we endeavoured to discover the most speedy mode of arresting the disorganizing process, assuaging suffering, prolonging the duration of life, and averting death, by the persevering administration of *physical* curative agents? It is

“The wise physician, skilled our *wounds to heal*,”

who is represented by the bard of ancient days

“As more than armies to the public weal.”

Having in my previous lecture dwelt at considerable length upon the importance of watching the influence of the *morale* upon the *physique*, and having directed your attention to the invaluable mental remedies which the physician has at his command in the treatment of disease—in fact, to the subject of MORAL THERAPEUTICS,—I may be considered to be deviating from my original position, by bringing specially under your notice the subject of the *medical*, in juxtaposition to the *moral*, treatment of insanity. I hope, before I conclude, to satisfactorily establish that in urging this matter upon your serious attention, I am advocating no views in the remotest degree inconsistent or adverse to those propounded in my former lecture; or any that will militate against a legitimate use of moral means in the cure of the disordered affections of the mind.

It must be confessed that but little attention has been paid, by those possessing great opportunities for observation and practice, to the exhibition and action of physical remedial agents in the treatment of those abnormal conditions of nervous structure implicating the healthy action of the thinking principle. To what cause is this inexcusable apathy to be attributed? The

neglect of the use of curative agents, on the part of those intrusted with the care of the insane, has not altogether arisen from an indisposition to make, by a persevering exhibition of appropriate medicine, an effort to re-establish the normal action of the brain and mind; but it is in the main the result—the necessary and inevitable consequence—of other causes, to which I shall refer. The doctrine promulgated by writers of celebrity—by men referred to and revered as our authorities and guides in this special department of medicine—that for the cure of insanity moral treatment is entitled to the highest rank, and to be deserving of the first consideration, has naturally tended to discountenance the administration of physical remedies in the treatment of insanity. We have been taught that *medical* ought to be subsidiary to *moral* means; and that any suggestion to remove a morbid mental impression by the aid of medicine, would indicate, on the part of the person making such a proposition, an inexcusable amount of ignorance, mental obtuseness, and obliquity! A recent writer on the subject of insanity exclaims, “When one man thinks himself a king, another a cobbler, and another that he can govern the world with his little finger, *can physic make him think otherwise?*”* Again: another author, in a work written to instruct the profession as to the treatment of the disorders of the mind, preposterously repudiates the idea of administering medicine for the cure of insanity, whilst the real nature of the mind remains unknown! He observes: “To prescribe for the mind, whilst *its nature remains a mystery*, is to prescribe for a *phantom!* As well might the mechanic attempt to regulate the multifarious operations dependent upon the agency of steam, by abstract discussion upon its nature, or to repair a fractured wheel, by directing his attention to the power that gave it motion, as for us to expect a successful result from remedies applied to an object the true nature and character of which we are wholly ignorant of; or of which, at least, we can only judge in its developments.”† Alas! can we conceive more fatally paralyzing doctrines—opinions so antagonistic to all right views of the science of pathology, and so extremely detrimental to the advancement of therapeutics—so disheartening to those who feel anxious to bring the powerful agents of the

* Dr. E. Willis on Mental Derangement.

† “Practical Notes on Insanity,” by F. B. Steward, M.D., p. 37.

materia medica to bear upon the treatment of this distressing form of disease.

Among the causes which have unfortunately given force and longevity to the idea that the administration of physical agents is of little or no avail in the treatment of the disorders of the mind, one holding the most prominent rank is the unphilosophical hypotheses which have been broached with the view of explaining the phenomena of insanity. To this source much of the fallacy, false induction, bad logic, and the neglect in reference to the use of remedial measures may be traced. Insanity has been considered to be a spiritual malady—a functional disease; to be an affection of the immaterial essence; to be a disorder of the soul, and not simply the result of a derangement of the material instrument of mind interfering with the healthy action of its manifestations. The brain has been supposed to be intact; not a fibre disturbed, not a vesicle altered, not a vessel overloaded: the encephalon has been imagined, in the severest forms of disturbed mind, to exist in all its integrity, so ridiculously absurd, so wildly unphilosophical, have been the notions entertained in reference to the proximate cause of insanity. This spiritual doctrine has naturally led to the conclusion—false in theory and destructive in practice—that for the alleviation and cure of the spiritual malady, spiritual remedies were the most important and essential. The clergyman instead of the physician was therefore summoned to the bed-side of the insane, and the bible and prayer-book displaced the physical remedies prescribed for the cure of the cerebral disorder.

In the earlier periods of the history of medicine, insanity was attributed to Divine wrath, demoniacal, Satanic, or malignant influence. It is a continuance in a belief of views somewhat analogous to these, but in a modified, less offensive, and different form, even in the present enlightened age, which has operated so disadvantageously in retarding the progress of cerebral pathology and therapeutic science. It may be said that a spiritual pathologist is a phenomenon—that the belief in the theory of insanity being an affection of the immaterial principle, is but an historical curiosity, a reminiscence of the dark ages. Alas! such is not the fact. I appeal to those whom I have the honour of addressing, whether a disposition does not exist among a considerable section of the profession to repudiate the idea of morbid action

being invariably the result of some abnormal state of the organic tissue.

The common phrase, "functional disease," is but another designation for the spiritual hypothesis—it is but a phantom of the mind—a pathological enigma, having no actual existence apart from the active imagination which gave it birth. When we assert that the "functional" or "spiritual" theory will not bear the test of serious examination—that it is at variance with all *à priori* and *à posteriori* reasoning—that it stands in direct opposition to positive, well-recognised, undeniable data, we are met by the interrogatory, Can you demonstrate to us the specific character of the change induced in the nervous matter which it is alleged gives rise to mental derangement? and do not the scalpel and microscope of the morbid anatomist in vain endeavour to ascertain, in many cases of positive, violent, and unequivocal insanity, any appreciable structural lesion in the nervous matter, in its investing membranes, or organs in close association with the brain, sufficient to account satisfactorily for the morbid phenomena exhibited during life? One would really infer, from the reasoning and assertions of those who take these spiritual views, and who repudiate the idea of insanity ever being the result of a physical change in the condition of some portion of the brain or its appendages, that the encephalon has no specific functions allotted to it; that it is altogether a useless and super-numerary organ; that it was created for no wise purposes; and that, as far as the phenomena of mind were concerned, we could have done as well without as with the brain! If this organ be not the material instrument of mind—if it be not the media through which the spiritual portion of our nature manifests its powers—the centre of sensation—the source of volition—the seat of the passions—

"The dome of thought,—the palace of the soul"—

I ask, what *are* its functions, its specific uses and operations?—for what object was this most exquisitely organized and complicated structure formed?—why does it receive so large a proportion of the blood, and why is it so carefully protected from injury? These interrogatories naturally arise in the mind, when we hear so unphilosophical and so unphysiological a theory propounded with reference to the possibility of the mind being

subject to disease apart from all derangement of the material organs with which it is so closely and indissolubly associated. Can we conceive a more preposterous notion than that sanctioned by high authority, and which inculcates that the spiritual principle admits of being distorted, deluded, depressed, exaggerated, perverted, exalted, independently of any form of bodily disease, or modification of nervous matter?

Is it necessary that I should, in this advanced age of the science of physiology, stop to argue the question as to whether the brain be or be not the material organ of the mind? Unless we admit this fact, how many curious psychological and pathological phenomena must for ever remain mysteriously inexplicable? In infancy, when the brain is only partially developed, and but imperfectly organized, the mental faculties are obscurely manifested. As the infant approaches childhood, and the brain expands in volume, and the convolutions become more complex in character, the capacities of the mind become enlarged. In the middle period of life, when the brain is supposed to have attained its highest and perfect state of organization, we recognise the mind exercising its most elevated attributes. As we descend in the scale, we discover, in a ratio to the encroachment of age and the advancement of decrepitude, a proportionate diminution of mental vigour and astuteness; the faculty of attention and the powers of observation are less acute, the memory is incapable of retaining impressions, the judgment is often weakened, the temper capricious,—in fact, all the faculties of the understanding become (as a general rule) impaired. This mental decay slowly progresses until the

“Evening twilight of our existence,”

when we fall into the

“Sere and yellow leaf.”

That rapid association of ideas and sense of the ludicrous which were wont to “set the table in a roar,” are no longer manifested; the brilliant repartee, the gorgeous imagery, the poetic fancy which captivated, and the glowing and impassioned eloquence which enchanted, no longer exercise, like a magic spell, their influence over us. The mind at this period is incapable of any intellectual improvement: it feeds upon the past. The recollection of former scenes, however, in which it played a conspicuous part, continues vivid. In the evening, there is no memory of the occurrences of the morning; the brain appears to be incapable of

receiving new impressions; ideas obtain no permanent hold of the mind, the intellect thus realizing the beautiful description recorded by Locke, who says, when speaking of the decay of the mind in old age,—“Ideas often die before us, and our minds represent to us those tombs to which we are approaching, where, though the brass and marble remain, yet the inscriptions are effaced by time, and the imagery moulders away.”

Having considered this spiritual theory of insanity in an *à priori* point of view, what are the deductions which we are justified in making, looking at the *vexata questio à posteriori*? It has been frequently urged by those who discard the material hypothesis or explanation of the phenomena of deranged mind, that if insanity were the effect of brain disease, not only should we invariably find after death morbid changes in this organ, but we should detect some peculiar and specific alterations in the nervous matter, entirely distinct in their character from the ordinary lesions of structure detected in the more obvious diseases of the encephalon. With reference to the first position, I need only refer to the recorded opinions of all the great cerebral pathologists, from the great Morgagni down to modern writers, to establish beyond all question, cavil, or dispute, that in the great majority of cases of death after attacks of insanity, the brain, some of its important organic elements, or its investing membranes, are found in an abnormal morbid state. It is true that Esquirol somewhat encouraged the doctrine of the spiritualists, by asserting that in many instances of insanity no change in the nervous matter could be detected after the most careful scrutiny; but that high authority was known to have materially altered his views upon this point at a more advanced period of his life; and his later pathological investigations tended, I think, conclusively to establish that the nervous matter was always found modified in its structure after death from insanity. To this subject I have paid much attention, and have patiently endeavoured to ascertain what are the acknowledged opinions of those who have had opportunities of arriving at safe results, and whose names entitle everything which they have recorded to our profound deference and respect. I have carefully, scrupulously, and zealously analyzed no less than 10,000 cases of the various shades and degrees of insanity, related by Esquirol, Pinel, Foville, Georget, Guislain, Calmiel, Flourens, Bell, Haslam, Prichard, Solly, Burrows, Bail-

larger, Boismont, Abercrombie, Bennett, and other British, American, and continental authorities; and as the result of these pathological researches, I have no hesitation in declaring that I feel, as the natural effect of the influence of these well-ascertained data upon my own mind, amazed that there ever could have existed a shadow of a doubt as to the physical origin of insanity. The statistical facts to which I refer are not yet sufficiently matured and arranged to submit to the profession; but I may say that they satisfy my own mind, beyond all suspicion, of the *material cause of mental derangement*. I do not maintain that I am in a position to describe the peculiar and specific alterations which some allege to give origin to that derangement of the action of thought to which we apply the term insanity. Admitting such a discovery to be beyond the range of finite intelligence, it does not in the slightest degree militate against the material view just propounded. We find the functions of the eye, lungs, heart, stomach, liver, all deranged in a most marked manner, as the consequence, not of one peculiar specific affection of these organs, but of a variety of diseases essentially different in their pathological character, and only resembling each other in producing an altered action of the organic function of the part. Why should an important organ like the brain be exempt from the influence of the vital laws regulating the morbid action of other structures? and why should those who advocate the material origin of insanity be taunted and twitted because they are unable to discover an affection of the nervous matter *sui generis* in its character, and invariably discoverable in the brain in cases of death from mental aberration?

How often does death occur from apoplexy, convulsive disease, affections of the heart, stomach, from catalepsy, chorea, protracted hysteria, without evidencing any morbid condition of the structure, supposed to be implicated in the morbid process, appreciable to the eye of the pathologist; yet we are not sufficiently bold to maintain that catalepsy, apoplexy, epilepsy, disease of the heart, violent convulsions, severe gastric derangement sufficient to impede all nutrition, and persistent hysteria in all its Protean forms, can ever be viewed as strictly functional in their character, and capable of existing apart from any disease or abnormal state of the material tissue. But are we satisfied that in the cases of apparently functional disorder recorded by authorities of

character and repute, the brain was accurately and scientifically examined—that the microscope aided the senses of the pathologist in his investigation? Was the brain, in all cases cited for the purpose of establishing that this organ was entirely free from all abnormal change, carefully macerated, weighed, and the different layers of the grey portion of the convoluted surface zealously scrutinized, in order to ascertain whether any change had taken place in its delicate structure? Was the chemical composition of the brain ascertained? Was the vesicular neurine minutely examined by means of a high microscopic power? Was it ascertained whether the blood was deprived of any of its essential and important constituents, and, as a consequence of such vitiated state, interfering with the healthy nervous nutrition? Were the blood-vessels of the brain removed and examined, with the view of ascertaining their calibre and condition of their coats? Was the state of the bones of the cranium, as well as the foramina, ascertained?

The spiritualists point with exultation to the cases recorded by Abercrombie and others, of extensive organic alterations having been found in the brain, which during life had not in the slightest degree, apparently, impaired or interfered with the normal action of mind; but if we carefully and scientifically investigate these instances, so often pompously and triumphantly paraded, I think we shall be compelled to admit they do not constitute data entitled to any weight in the solution of the important question at issue. It would be necessary for us to be informed upon good and unquestionable authority, of the precise character and locality of these alleged organic alterations—whether they were limited to the medullary, or extended to the cineritious portions of the cerebral matter; whether they were of slow or of sudden production; and also, whether the mind of the person having so great a degree of alleged disorganization discoverable in the brain after death, was carefully examined, and the actual condition of the mental powers satisfactorily ascertained. Positive, glaring, appreciable lunacy might, I readily admit, have been non-existent during life—the party need not *necessarily* have been insane, or guilty of any overt act of violence or extravagance sufficient to excite observation or compel restraint; but, nevertheless, the mind, in its *general operations*, might have been *considerably impaired and debilitated*, these affections having

escaped notice, and not have been made matter of record. I am much disposed to consider that if the history of the cases narrated, of extensive disorganization of the brain without obviously implicating the faculties of the mind, were carefully and minutely examined, it would have been found in *every case that the intellect more or less suffered, although occasionally not to the extent of recognisable, positive, and clearly-defined insanity.* Without a knowledge of all these important particulars, the data referred to are, in a purely scientific point of view, entitled to but little consideration. I can imagine that considerable lesion of structure might exist, if confined to the medullary portion of the brain, without obviously or palpably deranging the intellectual operations; but *no morbid change can exist in the hemispherical ganglia without involving to some extent the operations of the mind.*

In considering this matter, we should not forget that the brain can accommodate itself to a considerable amount of actual loss of structure and organic disease, if the morbid changes be of slow and progressive growth. Again, it is necessary to ascertain whether, in these instances, both hemispheres of the brain were involved in the disease; for as the brain is a *dual* organ, it is possible for considerable structural disease to exist in one hemisphere, the opposite side remaining intact, without obviously interfering with the healthy action of the intellectual faculties. Again, it has been urged that insanity must, in many cases, be a functional and not an organic disease, because it has occasionally been cured by moral remedies alone; that a delusion has been dissipated by a joke, and an apparently fixed morbid idea has been dispersed by an ingeniously-contrived stratagem. Such illustrations of remarkable cures are undoubtedly upon record; but they no more establish that the disorder was spiritual and functional in its character, than the fact of a paroxysm of gout being overpowered by a sudden mental shock, an attack of convulsions arrested by calling into exercise the passion of fear, would justify us in concluding that the diseases referred to were functional and spiritual affections, having no relation to any morbid condition of the physical part supposed to be their seat.

Considering the subject practically, let us for a moment ask ourselves the question, what have been the consequences of the general belief in the spiritual and functional character of this

disease? The lamentable effect has undoubtedly been, to discourage and discountenance the use of remedial measures; and the effect upon the public mind has, alas! been, to create the false impression that mental affections were not curable maladies, and that it was not in the power of the physician, by means of medicine, to administer to their relief. As the result of a too general belief in this sophistry—this dangerous fallacy—a vast amount of mental disease, particularly in its early and premonitory stage, is left to take its own uninterrupted course, until the unhappy sufferer has been placed beyond the reach of all curative agents. Why should the man who is conscious of the approach of mental infirmity—who feels his power of attention flagging, his volition becoming weakened, his affections perverted, and horrible fancies displacing healthy mental impressions—seek the aid of medicine, or fly to the physician for assistance, if he is taught to believe that the dark cloud which is gradually enshrouding his faculties is either the effect of a malignant spirit, the result of demoniacal influence, the consequence of the curse of the Almighty, or a disease entailed upon him as the punishment for his sins? “Madness,” says Dr. Burrows, “is one of the *curses imposed by the wrath of the Almighty on his people for their sins, and deliverance from it is not the least of the miracles performed by our Saviour*”! I quote this passage to show what are the prevailing notions of the cause of insanity among the first authorities in this country.* Why should the relations and friends of those so unhappily afflicted seek the aid of medicine, when men of position and repute both publicly and privately propound such doctrines, and as a consequence discourage all physical treatment? Great and awful is the responsibility of those who thus thoughtlessly weaken the confidence of the public in the efficacy of physical curative agents in the treatment of insanity. “I was told,” said a lady, “that medicine was of no avail in the affections of the mind. I went to the clergyman for assistance, but could obtain none. I have struggled for weeks heroically against the disposition to suicide, with the prayer-book in one hand, and the open razor in the other. Five times have I felt its keen edge at my throat, but a voice within me suddenly commanded me to drop the murderous instrument; and yet at other times the same voice urged me

* “Commentaries on Insanity,” by Dr. Burrows.

desperately on to self-destruction. I knew I was ill—seriously ill—bodily ill; yet no one pointed out to me the right remedy for my horrible impulse, or recommended me to place myself in the hands of the physician.” Such was the statement of a patient who voluntarily subjected herself to medical treatment, and was happily restored to health.

It is the prevalent opinion, even among persons otherwise well educated and intelligent, that the desire of self-destruction is in the majority of cases a mental act, unconnected with a disturbed condition of the bodily function, and incurable by any process of medical treatment; that the mental depression which is so generally associated with the suicidal tendency is an affection of the mind *per se*, the physical organization having no direct connexion with what is termed the *spiritual* impulse. This metaphysical view of the matter is fraught with much mischief, and, I have no doubt, has led to the sacrifice of many valuable lives. It is a matter of the highest moment that the public mind should be undeceived upon this point. Right views on this subject ought to be generally diffused. It is of consequence to establish the belief that the suicidal idea is *almost generally* connected with a morbid condition of the mind, and is often the only existing evidence of such an affection; that it is, with a few exceptions, universally associated with physical disorder, disturbing the healthy balance of the understanding; and that the bodily affection, which is, in nine cases out of ten, the *cause* of the mental irregularity, is easily curable by the judicious application of remedial means. The tendency of the spiritual or metaphysical view of the question is to create a distrust in remedial measures, and the poor man who is struggling against an almost overpowering desire to destroy himself is induced to neglect entirely his lamentable condition, under the belief that he is literally placed beyond the reach of curative agents, and that the only remedy for his mental suffering is death!

If a person in this unhappy state of mind is induced to believe that his mental despondency is but a *consequence* or *effect* of a disturbed bodily condition, influencing, either directly or indirectly, the natural and healthy operation of the brain and nervous system, and giving rise to perverted ideas—that his malady is curable, he may be induced to avail himself of the means which

science has placed at the disposal of the physician, and thus be protected against his own insane impulses.

Where no disease is suspected, no remedy will be sought. Tell a man who has attempted to destroy himself that he is perfectly sane—that his judgment is sound—that his will is not perverted—that the impulse which urges him to the commission of suicide is not associated with any deviation from corporeal health—and you inculcate ideas not only fallacious, but most pernicious in their character and tendency. We might, with as much truth, tell a person playing with a lighted taper at the edge of a barrel of gunpowder, that his life is not in jeopardy, as to say to a person disposed to suicide that he is in the perfect enjoyment of health, and requires no moral or medical treatment. It may be laid down as an indisputable axiom, that in every case of this kind, bodily disease may, upon a careful examination, be detected. I never yet saw a case where a desire to commit suicide was present, in which there was not corporeal indisposition.

Having in the preceding portion of these observations endeavoured to establish what I conceive to be an important and necessary preliminary point, it is now my province to bring under notice a sketch, a mere *outline*, of my own views as to the pathology and medical treatment of insanity. Before referring to this part of my subject, I would premise that no right estimate can be entertained of the importance of these investigations unless we apply to the study of the diseases of the brain, and the cure of its disorders, the same enlarged and general principles which guide us in the investigation and treatment of the affections of other organic structures. An error of some magnitude has been committed by those who consider insanity to be a special, uniform, specific, and peculiar malady, justifying us in placing those so afflicted out of the ordinary nosological scale and sphere of medical practice. Again, it is necessary that we should, before being able to appreciate the effect of medical treatment, entertain just and enlightened views as to the **CURABILITY** of **INSANITY**. I now speak from a somewhat enlarged experience, from much anxious consideration of the matter, and I have no hesitation in affirming that, if brought within the sphere of medical treatment in the earlier stages, or even within a few months of the attack, insanity, unless the result of severe physical injury to the head, or connected with a peculiar conformation of chest and cranium, and

an hereditary diathesis, *is as easily curable as any other form of bodily disease for the treatment of which we apply the resources of our art.* Can there be a more lamentable error, or a more dangerous, false, or unhappy doctrine than that urged by those who maintain that the disordered affections of the mind are not amenable to the recognised principles of medical science? * I again declare it to be my positive and deliberately formed opinion, that there are few diseases of equal magnitude so susceptible of successful medical treatment in the incipient form as those implicating the normal action of thought. The existence of so vast an amount of incurable insanity within the wards of our national and private asylums, is a fact pregnant with important truths. In the history of these unhappy persons—these lost and ruined minds—we read, in many cases, recorded the sad, melancholy, and lamentable results of either a total neglect of all efficient curative treatment at a period when it might have arrested the onward advance of the cerebral mischief, and maintained reason upon her seat; or of the use of injudicious and unjustifiable measures of treatment under mistaken notions of the nature and pathology of the disease. In no class of affections is it so imperatively necessary to inculcate the importance of early and prompt treatment, as in the disorders of the brain affecting the manifestations of the mind. I do not maintain that our curative agents are of no avail when the disease has passed beyond what is designated the “curable stage.” My experience irresistibly leads to the conclusion that we have often in our power the means of curing insanity, even after it has been of some years’ duration, *if we obtain a thorough appreciation of the physical and mental aspects of the case, and perseveringly*

* “You do not pretend to *cure* insanity!” exclaimed a gentleman of considerable intelligence to me, whilst detailing the particulars of a distressing attack occurring in a member of his own family; “for,” he continued, “I heard Dr. — positively declare, in a public lecture, that ‘*he lamented to be obliged to say, that in the cure of insanity, little or no good resulted from medical treatment.*’” Sad and fatal doctrine! Whilst recently visiting Bethlehem Hospital, to see, at the request of their friends, two patients in that establishment, I heard a foreigner who had been inspecting the asylum observe to Dr. Wood (the then resident medical officer of the establishment), whilst talking of the medical treatment of insanity, that it was quite a mistake to have a portion of the asylum set apart for the “incurable patients.” “*The word ‘incurable,’ in reference to insanity,*” he continued, “*should never be used.*” I would much prefer pinning my faith to the doctrine of the foreign than to that of the English physician, who attempted to weaken our confidence in the curability of insanity by means of medicine.

and continuously apply remedial measures for its removal. I cannot, however, dwell too strongly upon the vital necessity of the early and prompt exhibition of curative means in the incipient stage of mental derangement:—

“Principiis obsta : sero medicina paratur
Cum mala per longas convaluere moras.”—OVID.

It becomes necessary, before proceeding to the consideration of the practical division of my subject, that I should briefly refer to the morbid anatomy of the brain in insanity. It is not my intention to cite the conflicting opinions of writers of repute in reference to this section of pathology; neither shall I attempt to reconcile the varied and contradictory statements of eminent pathologists who have investigated this important subject.

With these prefatory observations, I will concisely submit to you the conclusions to which I have arrived in relation to this much-vexed question. I believe insanity (I am now referring to persistent insanity, not those transient and evanescent forms of disturbed mind occasionally witnessed) to be the result of a *specific morbid action of the hemispherical ganglia, ranging from irritation, passive and active congestion, up to positive and unmistakeable inflammatory action.* This state of the brain may be confined to one or two of the six layers composing the hemispherical ganglia; but all the layers are generally more or less implicated, in conjunction with the tubular fibres passing from the hemispheres through the vesicular neurine. This specific inflammation, from its incipient to the more advanced stage, is often associated with great vital and nervous depression. It is, like analogous inflammations of other structures, not often accompanied by much constitutional or febrile disturbance, unless it loses its specific features, and approximates in its character to the inflammation of active cerebritis or meningitis. This state of the hemispherical ganglia is frequently conjoined with active sanguineous circulation or congestion, both of the substance of the brain and its investing membranes. The morbid cerebral pathological phenomena—viz. the opacity of the arachnoid, the thickening of the dura mater, its adhesions to the cranium, the depositions so often observed upon the convoluted surface of the hemispheres, and on the meninges, the hypertrophy, scirrhus, the cancerous affections, the induration, the depositions of bony matter in the cerebral vessels and on the dura mater, the serous

fluids in and the ulcerations upon the surface of the ventricles, the alterations in the size, consistence, colour, and chemical composition of the vesicular neurine and fibrous portion of the brain—are all, in my opinion, the *results*, the *sequelæ*, more or less, of that specific inflammatory condition of the hemispherical ganglia to which I have referred. It does not necessarily follow that the *fons et origo mali* of insanity is invariably to be traced to the brain. The preliminary morbid action is often situated in the heart, stomach, liver, bowels, uterus, lungs, or the kidneys, the brain being only *secondarily* affected; nevertheless, in all cases inducing actual insanity, the hemispherical ganglia are involved in the morbid action. The most recent pathological doctrine propounded to explain the phenomena of insanity—I refer to the views of a recent writer*—that derangement of mind is the effect of “*loss of nervous tone*,” and that this loss of nervous tone is “*caused by a premature and abnormal exhaustibility of the vital powers of the sensorium*”—conveys to my mind no clear, definite, or precise pathological idea. It is true that we often have, in these affections of the brain and disorders of the mind, “*loss of nervous tone*,” and “*exhaustion of vital power*,” but, to my conception, these are but the *effects* of a *prior morbid condition of the encephalon*, the *sequelæ* of specific inflammation of the hemispherical ganglia. To argue that insanity is invariably and exclusively the result of “*loss of nervous tone*,” is to confound cause and effect, the *post hoc* with the *propter hoc*; and would, as regards therapeutical measures, act as an *ignis fatuus*, and allure us as pathologists from the right and legitimate path. I feel anxious that my views upon this important subject should be clearly enunciated, and not open to misconception. I think much mischief has arisen from a belief in the existence of *active ordinary cerebral inflammation* in cases of insanity, for it has led to the adoption of treatment most destructive to life, and has seriously interfered with the permanent restoration of the reasoning powers. Nevertheless, insanity is *occasionally* complicated with acute cerebral symptoms sufficient to justify us in the cautious use of somewhat active measures for its removal. We must avoid the fatal error of a too rapid process of generalization, and be careful of not looking to symptoms instead of to the disease itself, and of permitting ingenious and well-constructed

* Dr. H. Munro.

à priori theories of the nature of insanity to dazzle our imaginations, and abstract the mind from the steady and patient investigation of pathological science, and individual cases of disease. If we allow our judgment to be warped by the inflammatory theory on the one side, (I am now speaking of *ordinary*, not of *specific* inflammation,) and conclude that the excitement of mania is to be subdued by copious depletion or the administration of antiphlogistic measures,—or if, on the other hand, we adopt the speculative opinions of those who believe that in every case of insanity, irrespectively of its origin, its progress, or its character, there exists “mere loss of nervous tone,” caused by a “premature abnormal exhaustibility of the vital powers of the sensorium,”—how lamentably shall we be misled as to the real character of the disease, and in the application of our therapeutic agents? These circumscribed and partial views of the pathology of insanity, often, alas! lead to serious solecisms in practice. In ninety per cent. of the cases of acute mania, there is found in the brain and its meninges a state of sanguineous congestion, particularly of the hemispherical ganglia, combined with alterations in the grey nervous matter. In forming an opinion of the actual pathological condition of the cerebral substance, we should remember that, particularly in public asylums, it is a rare occurrence for recent cases to be admitted; that the acute and sub-acute active cerebral conditions have subsided, and the disease has assumed a chronic form, before the patient is examined and placed under treatment; consequently many deductions recorded by pathologists have been based upon the study of chronic, and not of acute, mania. A large per-centage of the cases, before admission into our national asylums, have passed through the primary and acute stages, and have probably been subjected to medical treatment. This fact must never be lost sight of in forming our opinion, not only of the nature of the disease itself, but of the medical treatment necessary for its cure. In private practice the acute forms of insanity are often met with; but even with the advantages which the physician in general practice can command, of investigating the earlier stages of deranged mind, he often discovers that the mental affection has been allowed to exist and slowly progress for a considerable period, no treatment, either medical or moral, having been adopted for its removal. In the incipient forms of insanity, particularly when it manifests itself in plethoric

constitutions, has been sudden in its development, is the result of physical causes, and is connected with the retrocession of gout, or is rheumatic in its character, there can be no doubt the nature of the change induced in the brain is more allied to that of inflammation than that of nervous exhaustion. The attacks from the slow and insidious operation of moral causes are less likely to be accompanied by active cerebral symptoms. In many instances the maniacal excitement is *asthenic* or *atonic* in its character, resembling the delirium of the last stages of typhus fever.

The most simple classification of insanity, the one I think best adapted for useful and practical purposes, is its division into the *acute* and *chronic* forms; the insanity ushered in by *excitement* or by *depression*, into *mania* and *melancholia*—*amentia* and *dementia*. The minute divisions and subdivisions, the complicated and confused classification taught by lecturers and found detailed in books, may serve the ostentatious purpose of those desirous of making a pompous display of scholastic and scientific lore, but I think they have tended to bewilder and obscure the understanding, and lead the student in search of practical truth from the investigation of the *disease itself* to the study of its *symptoms*, and to the consideration of unessential points and shades of difference. Adhering to this division of the subject, each form should be viewed in relation to its *complications*, as well as to its *associated diseases*. Among the former are epilepsy, suicide, homicide, paraplegia, hemiplegia, and general paralysis. The associated diseases implicate the lungs, heart, liver, stomach, bowels, kidney, bladder, uterus, and skin.

Before adverting to the preliminary examination of the patient supposed to be insane, and suggesting rules for arriving at an accurate prognosis in these cases, I would premise that those inexperienced in the investigation of this class of cases would often arrive at false and inaccurate conclusions, if they were not cognizant of the fact, that the insane often describe sensations which they have never in reality experienced, and call attention to important symptoms which have no existence except in their own morbid imaginations. A patient will assert that he has a racking headache, or great pain and tenderness in the epigastric region, both symptoms being the fanciful creations of his diseased mind. This is particularly the case in the hysterical forms of insanity, in which there always exists a disposition to pervert the truth, and

exaggerate the symptoms. Again, serious bodily disease may be present, the patient not being sufficiently conscious to comprehend the nature of the questions asked, or able to give intelligible replies to the anxious interrogatories of the physician. Insanity often masks, effectually obscures, other organic affections, the greater malady overpowering the lesser disease. When Lear, Kent, and the Fool, are standing alone upon the wild heath, exposed to the merciless pelting of the pitiless tempest, Kent feelingly implores the king to seek shelter from the "tyranny of the open night," in an adjoining hovel. It is then that Lear gives expression to the great psychological truth just enunciated—

"Thou think'st 'tis much, that this contentious storm
 Invades us to the skin: so 'tis to thee;
 But *where the greater malady is fixed,*
The lesser is scarce felt;
 * * * * * * * * *
 The tempest *in my mind*
 Doth from my senses take *all feeling else*
Save what beats there."

Disease of the brain may destroy all apparent consciousness of pain, and keep in abeyance the outward and appreciable manifestations of other important indications of organic mischief. Extensive disease of the stomach, lungs, kidneys, bowels, uterus, and heart, has been known, during an attack of insanity, to progress to a fearful extent, without any obvious or recognisable indication of its existence. Insanity appears also occasionally to modify the physiognomy and symptomatology of ordinary diseases, and to give them peculiar and special characteristic features.

Again, it is necessary for the physician to watch the operation of medicine in masking important diseases. The different forms of narcotics, if given in heroic doses, often mislead us in our estimate of the nature of bodily diseases not directly connected with the mental affection. In the examination of these cases the most essential preliminary matters of inquiry have relation to the age, temperament, previous occupation, and condition in life of the patient. It will be necessary to ascertain the character and duration of the attack; whether it has resulted from moral or physical causes; is of sudden, insidious, or of slow growth; whether it has an hereditary origin, is the effect of a mental shock, or of mechanical injury; whether it is the first attack, and, if not, in what features it differs from previous paroxysms. It will

also be our duty to ascertain whether the insanity be complicated with epilepsy, paraplegia, or hemiplegia, or with suicidal and homicidal impulses. If any prior treatment has been adopted, we must inform ourselves of its nature; and also ascertain whether the patient has suffered from gout, heart disease, rheumatism, cutaneous affections, or syphilis? It is important to obtain accurate information in relation to the condition of the uterine functions, and to ascertain the state of the moral affections. We should also inquire whether the patient has been suspected of habits of self-abuse. Having obtained accurate information upon these essential points, our own personal observation will aid us in ascertaining the character of the mental disturbance; the configuration of the head, chest, and abdomen; the gait of the patient, the degree of sensibility and volitional power manifested; the state of the retina, the action of the pulse, the composition of urine, and temperature of the scalp and body generally; the condition of the skin and chylo-poietic viscera; the action of the heart, lungs, and nature of any existing disease of the uterus. If a patient complains of any local mischief, however imaginary it may appear to be at the time, it is essentially necessary that we should clearly satisfy our minds upon the point, before dismissing it as not entitled to serious investigation. A patient once bitterly complained of retention of urine; upon examination, the bladder, was found to be distended, and the man had passed no urine for twenty-four hours. I was about to introduce a catheter, when the patient burst into a fit of laughter, and immediately emptied his bladder. Esquirol relates a case of a merchant, who, whilst suffering from melancholia, declared that some foreign body was sticking in his throat. No notice was taken of this supposed fanciful idea. The patient died, and an ulcer was discovered at the upper third of the œsophagus. A patient complained of devils being in his stomach and bowels, and declared that they were acted upon by electric, magnetic agencies. After death he was found to have scirrhus of the stomach, and chronic inflammation of the bowels. A patient refused to eat; he said he could not swallow his food without great pain. As he had exhibited other symptoms of a disposition to suicide, it was thought by myself and others, that his obstinate refusal of food was associated with ideas of self-destruction. He died, and at the post-mortem examination a stricture in the pylorus was discovered.

These illustrations, and they could easily be extended, will prove the importance of paying minute attention to particular delusions, with the view of ascertaining whether they have not an *actual* physical origin.

The *prognosis* in cases of insanity will mainly depend upon the duration of the attack, its character and origin, and the diathesis of the patient. The prognosis is generally unfavourable if the disease be hereditary—if the symptoms are similar in character to those exhibited by other members of the family when insane. Insanity, accompanied by acute excitement, is, *ceteris paribus*, more easy of cure than when it has been of slow and gradual growth, and is marked by great mental depression. The prognosis is favourable in cases of puerperal mania; it is unfavourable when there exists a want of symmetry between the two sides of the head, with small anterior and large posterior cerebral development. Any great inequality in the cranial conformation would be a suspicious indication. The existence of any malformation in the development of the chest is also an unfavourable sign, and would induce us to give a guarded prognosis. Dr. Darwin says, when a person becomes insane, who has a small family of children to absorb his attention, his prospect of recovery is but small, as it establishes that the maniacal hallucination is more powerful than those ideas which ought to interest the patient most. The prognosis is unfavourable when patients are under the morbid delusion that they are poisoned, and constantly complain of suffering internally from peculiar sensations. Religious delusions are more difficult to eradicate than other morbid impressions. The age of the patient will materially guide us in forming a correct prognosis. Hippocrates says the insane are not curable after the fortieth year; Esquirol maintains the greater portion recover between the ages of twenty and thirty; Haslam between the ages of ten and twenty. As a principle, we may conclude that the probability of recovery in any given case is in proportion to the early age, physical condition, and duration of the attack. When a patient has youth and a good constitution to aid him, and is advantageously placed, having at command remedial measures, and is excluded from all irritating circumstances, the prognosis may be considered favourable. I have seen patients after the advanced age of sixty and seventy recover; and cases of cure are upon record, where insanity has existed for ten,

fifteen, and twenty years. In forming our prognosis, it is important to ascertain the educational training of the patient. Has he been in the habit of exercising great self-control? Has his mind been well disciplined? Has he kept in abeyance the passions, or have the emotions and impulses of his nature obtained the mastery over him? He who has been taught to practise self-denial and self-control in early life is, *ceteris paribus*, in a more favourable position for recovery than he who has permitted himself to be the willing and obedient slave of every wild passion and caprice. Insanity, accompanied with criminal propensities, is said to be incurable, because, as Ideler urges, such patients "cannot bear the torments of their consciences, and relapse into the stupefaction of insanity to flee from the consciousness of their guilt."* The prognosis is unfavourable when the insanity is complicated with organic disease of the heart and lungs, with deafness, and paralysis in any of its forms.† Lesions of the motor power are very unfavourable indications. Great impairment of mind, accompanied with delusions of an exalted character, and associated with paralysis, is generally incurable. Esquirol says, epilepsy, if associated with insanity, places the patient beyond all prospect of cure. I should be loth to adopt this sweeping condemnation. I have seen attacks of epilepsy, combined with mental derangement, recover; although, I admit, they constitute a difficult class of cases to manage. Epileptic vertigo, the *Petit-Mal* of the French, is generally more disastrous in its effects upon the powers of the mind than other forms of epilepsy. The prognosis in these cases is generally unfavourable.

In submitting for your consideration a few *general principles of medical treatment*, I would premise, that, in a lecture like the present, it would be impossible to develop, in anything like detail,

* "No disease of the imagination is so difficult of cure as that which is complicated with guilt; fancy and conscience then are interchangeably upon us, so often shift their places, that the illusions of the one are not distinguished from the dictates of the other. If fancy presents images not moral or religious, the mind drives them away when they give it pain; but when melancholic notions take the form of duty, they lay hold of the faculties without opposition, because we are afraid to exclude or banish them: for this reason the superstitions are always melancholy, and the melancholy always superstitious."—DR. JOHNSON. *Rasselas*.

† "Deafness is not of itself a symptom of insanity, but it is often a concomitant, and their combination forms incurable insanity. The reason probably is, that the same cause which destroys the hearing, or affects the auditory nerve, extends also to the brain itself."—DR. BRIGHAM.

the special and particular class of remedial agents adapted for all forms of deranged mind. My time will only admit of generalizing this subject, and of directing attention to some of the more prominent phases of insanity, and those which present to us the greatest obstacles and difficulties in their management.

In regard to the treatment of acute mania, the important and much litigated question among practitioners of all countries, is that relating to the propriety of depletion. Need I refer to the conflicting and contradictory opinions entertained by eminent writers on this important and much-vexed therapeutical point? Whilst some practitioners of great repute and enlarged experience fearlessly recommend copious general depletion for the treatment of insanity, and cite cases in which this practice has been attended with the happiest results, others, equally eminent, whose opinions are as much entitled to our respect, fearlessly denounce the lancet as a most fatally dangerous weapon, and shudder at the suggestion of abstracting, even locally, the smallest quantity of blood! In avoiding Scylla, we must be cautious of being impelled into Charybdis. The error consists in a vain effort to discover a *uniform mode of treatment, and attempting to propound some specific mode of procedure adapted to all cases*. He who maintains that bloodletting is never to be adopted in the treatment of mania, without reference to its character, its origin, the peculiar constitution of the patient, and the existence of local physical morbid conditions, which may be materially modifying the disease, and giving active development to morbid impressions, is not a safe practitioner. Neither would I confide in the judgment and practice of the physician who would, in every case of violent maniacal excitement, attempt to tranquillize the patient and subdue excitement by either general or local depletion.

In attacks of insanity, when the symptoms are acute, the patients young and plethoric, the habitual secretions suppressed, the head hot and painful, the eyes intolerant of light, the conjunctivæ injected, the pupils contracted, the pulse rapid and hard, and the paroxysm sudden in its development, *one* general bleeding will often arrest the progress of the cerebral mischief, greatly facilitate the operation of other remedies, and ultimately promote recovery. In proportion as the symptoms of ordinary insanity approach those of phrenitis, or meningitis, shall we be justified in

the use of general depletion. Although it is only occasionally, in instances presenting peculiar characteristic features—cases occurring in the higher ranks of life, where the patient has been in the habit of living *above par*, and is of a sanguineous temperament—that we are justified in having recourse to the lancet, there is a large class of recent cases presenting themselves in the asylums for the insane, both public and private, in the treatment of which we should be guilty of culpable and cruel negligence, if we were to omit to relieve the cerebral symptoms by means of the *local* abstraction of blood. It is, alas! the fashion and caprice of the day to recklessly decry the application of cupping-glasses or of leeches in the treatment of insanity, in consequence, I think, of the slavish deference shown to the opinions of a few eminent French pathologists, who have, by their indiscriminate denunciation of *all depletion*, frightened us into submission, and compelled us to do violence to our own judgment. The local abstraction of blood is, in the hands of the discreet and judicious practitioner, *a powerful curative agent*; and yet it is the practice of some men, and men, too, of position, to discard altogether the remedy!

I will briefly refer to the kind of case in which the local abstraction of blood will be found most beneficial, if proper regard be had to the temperament, constitutional condition, and the local circumstances modifying the character of the attack. In insanity, when the exacerbations occur at the menstrual period, leeches to the vulva and thighs, with the use of the foot-bath and the exhibition of aloetic purgatives, will be attended by the most favourable results. In irregular and obstructed menstruation, the local abstraction of blood will be very serviceable. In suppressed hæmorrhoids, leeches to the neighbourhood of the sphincter ani will act beneficially by unloading the hæmorrhoidal vessels, and thus relieve the brain of undue excitement. In cases of nymphomania, leeches to the vulva are indicated, and have been known to produce great benefit. In cases of intermittent insanity, the paroxysm may often be cut short by relieving the overloaded state of the vessels of the head by means of cupping or the application of leeches. In some instances, I have applied leeches to the Schneiderian membrane, particularly for the treatment of insanity occurring in early life, and connected with conduct evidently the effect of cerebral irritation. I have

seen this mode of procedure of essential benefit in persons of plethoric constitution and of sanguineous temperament. Occasionally the insanity is found to be associated with active visceral disease, or with hypertrophy and other affections of the heart. Under these circumstances, when there exists great tenderness over the region of any of the visceral organs, and we are satisfied, by a careful stethoscopic examination, that hypertrophy of the heart is present, leeches applied over the seat of the local mischief, conjoined with other appropriate treatment, will materially aid us in subduing the maniacal affection. In cases of illusions of hearing, or of vision, it will often be necessary to apply leeches behind the ears, or over the superciliary ridges. I have known this practice entirely remove the morbid illusions which had been embittering the patient's life.

But apart entirely from the local affections to which I have referred, for the treatment of idiopathic insanity, apparently without any complications, or modified by any of the associated diseases, the careful and temperate local abstraction of blood, when general depletion is inadmissible, will often materially shorten the duration of an attack and restore the mind to a healthy condition. I am anxious to record my favourable opinion of this mode of treatment, because I have witnessed so many sad results from an opposite timid and reprehensible neglect of the means placed within our power for the treatment of the varied forms and degrees of mental derangement. Sad consequences have undoubtedly followed the indiscriminate use of depletory measures. The presence of violent mental excitement has occasionally led the practitioner to the conclusion that the disease was of an active character; and in the attempt to allay the undue cerebral excitement by means of antiphlogistic measures, the patient has sunk into incurable and hopeless dementia! But whilst recognising an *anæmic* class of case, where great excitement is often associated with loss of nervous and vital power, we must be cautious in permitting serious disease to be creeping stealthily on in the delicate structure of the brain, no effort being made to relieve the congested cerebral vessels or inflamed nervous tissue, until serious disorganization has taken place in the vesicular matter, and the patient is for ever lost. In the treatment of acute mania, the remedy next in importance to cautious depletion is that of *prolonged hot baths*. To Dr. Brierre

de Boismont, of Paris, at whose excellent institution I first witnessed the application of this remedial agent, the profession is indebted for reviving a practice which had long fallen into disrepute. In the treatment of acute mania, the prolonged hot baths will be found of the most essential service. Dr. Brierre de Boismont has recorded the history of sixty-one out of seventy-two cases that were subjected to this mode of treatment. Three-fourths of this number were cured in a week, and the remainder in a fortnight. The patients remain from eight to ten and fifteen hours in warm baths, whilst a current of cold water is continually poured over the head; the temperature of these baths is from 82° to 86° Fahr.; the affusions 60° Fahr. Among the therapeutic effects of these baths, Dr. B. de Boismont reckons a diminution of the circulation and respiration, relaxation of the skin, alleviation of thirst, the introduction of a considerable quantity of water into the economy, an abundant discharge of limpid urine, a tendency to sleep, a state of repose. This mode of treatment is said to be inadmissible in cases of periodic intermittent mania, in insanity beginning with great mental impairment, or associated with epilepsy or general paralysis. The result of my own experience of this plan of treatment has produced a very favourable impression upon my mind, and I think it is entitled to a fair trial in all our asylums where recent cases are admitted.

In some forms of acute mania it is desirable, as a substitute for depletion, to diminish the activity of the circulation by the exhibition of nauseating doses of the tartrate of antimony; it may be serviceably combined with the tinctures of digitalis and hyoscyamus. This remedy, however, requires close watching, as it often has been known to suddenly reduce the vital powers to a low ebb, and extinguish life. It will be found beneficial in proportion to the recent character of the case and the positive activity of the cerebral circulation. The tincture of digitalis was formerly in great repute as an anti-maniacal remedy; the experience of late years has not encouraged us in administering it in the doses prescribed by some of the old writers; nevertheless, it is a useful agent, and occasionally proves a valuable auxiliary in the hand of the practitioner who carefully observes its therapeutic operation.

For the cure of the acute forms of insanity, the douche bath has been much lauded; but this remedy is now rarely used in

British asylums. I have occasionally seen benefit derived from its exhibition, but great caution is required in its use. A patient has been subjected, whilst in a paroxysm of acute delirium, to the douche bath, and has sunk almost immediately into incurable idiocy! The physical shock has occasionally been known to produce a good moral impression. For illustration: a patient imagined himself emperor of the world, and would not allow any one to address him by any other title. The immediate application of the douche bath destroyed his idea of royal dignity, and he was willing to admit that he had never been, nor was at any time, a regal personage. A few hours subsequently the delusive impression returned in all its original force; the douche bath was again had recourse to, and a second time the morbid impression vanished; by a series of baths he was restored to sanity, and after his complete recovery, when the particulars of his case were placed before him, he observed, 'Why did you not whip me, and beat this nonsense out of my head? I wonder how you could have borne with my folly, or I have been guilty of such contemptible arrogance and obstinacy.' As a substitute for the douche, the shower bath is often used with great benefit, particularly in certain forms of melancholia, associated with nervous depression and general debility. In cases of melancholia, or other kinds of chronic insanity connected with a congested state of the liver, the nitro-muriatic bath will occasionally do much good. In a few instances I have noticed marked benefit from the use of Bertolini's sedative bath, composed of henbane two pounds, and equal parts of hemlock and cherry laurel leaves, well infused in a sufficient quantity of hot water. But the simple hot bath, in certain conditions of the nervous system, particularly in some forms of suicidal mania, is of the utmost benefit. A warm bath a short period before retiring to rest, bathing the head at the same time with cold water, particularly if the scalp be unnaturally hot, will often ensure a quiet and composed night, when no description of sedative, however potent its character and dose, would influence the system.

In the early stages of insanity, and throughout its whole course, the bowels are often in an obstinately constipated condition. The concentration of nervous energy in the brain interferes with that supply which should proceed to other structures; consequently there appears to be a want of healthy sensibility in the

mucous membrane of the bowels, and an interruption to the peristaltic action of the intestinal canal. There is no class of agents which acts so certainly and effectually, in relieving the mind when under the influence of depressing emotion, as cathartics. The ancients considered hellebore as a specific in certain forms of melancholia. In the hands of modern practitioners, this drug has not been found to merit the high encomiums which have been passed upon it. It is important in every case of insanity, but particularly in the acute stages of mental derangement, to act powerfully upon the bowels by means of a succession of brisk purgatives. The bowels are often found gorged with fecal matter, and immediate relief often follows the administration of two or three doses of calomel and colocynth, or of croton-oil. It will often be necessary to assist the operation of the cathartics by means of enemata. In hysterical and some other forms of insanity there is frequently a disposition on the part of the patient resolutely to resist the calls of nature, and, knowing this peculiarity, we must carefully watch the condition of the bowels, otherwise serious mechanical obstructions may ensue, followed by intractable diseases of the rectum.

Insanity is often associated with gastric and intestinal disease, with an irritable condition of the mucous membrane of the alimentary canal; and, in such cases, although it is important to relieve the bowels and prevent them from being constipated, we must bear in mind that the injudicious exhibition of irritating drastic cathartics may aggravate the mental disease, by increasing the gastric and intestinal irritation, and thus do permanent and irremediable mischief. Much injury may arise from the indiscriminate administration of cathartics. In insanity associated with menstrual obstructions, it will be necessary to exhibit the class of purgatives known to act specifically upon the lower bowel; consequently aloetic cathartics, such as the compound decoction of aloes, and the compound galbanum pill, are found of most service. In plethoric conditions of the system, when there is a marked determination of blood to the head, no medicine will relieve so speedily as active doses of the compound powder of jalap.

In the treatment of insanity, the class of medicines termed *sedative* play an important part. If exhibited with judgment, the most gratifying results often follow *their continuous and*

persevering administration. The sedative treatment of insanity is a subject of itself, and I quite despair of touching even upon the confines of the many interesting and important points involved in the consideration of this division of my lecture. In insanity unassociated with active cerebral circulation, congestion, or paralysis, or after the head symptoms have been relieved by the local abstraction of blood and the administration of appropriate medicine, the exhibition of sedatives will be followed by the most beneficial results. In recent cases they are generally inadmissible, except in delirium tremens and puerperal insanity, and other forms of derangement analogous in their pathological character and symptoms to these affections. In chronic insanity, in melancholia unconnected with abdominal repletion, or visceral disease, the persevering use of sedatives in various combinations will often re-establish sanity, when no other course of treatment would be successful in dispelling the illusive impressions, or raising the drooping and desponding spirits. Battley's solution, the tincture of opium, the meconite, acetate, and hydrochlorate of morphia, the preparations of hyoscyamus, conium, stramonium, camphor, hops, aconite, ether, chloroform, hydrocyanic acid, hydrochloric ether, Indian hemp, are all of great and essential service, if administered with judgment and sagacity. In suicidal insanity, when local cerebral congestion is absent, and the general health and secretions are in good condition, the meconite and hydrochlorate of morphia often act like a charm, if *uninterruptedly and perseveringly given* until the nervous system is completely under their influence. I have witnessed the most distressing attacks of suicidal mania yield to this treatment, when every other mode of procedure had failed. I could cite the particulars of numerous cases of this form of insanity radically cured by the occasional local abstraction of blood from the head, the administration of alteratives, the warm bath, and sedatives. In the exhibition of this powerful curative agent, our success will often depend upon a *ready adaptation of the form of sedative to the description of case in which it may be deemed admissible, and a judicious admixture of various kinds of sedatives.* I do not think we pay sufficient attention to this fact. I have often seen an apparently incurable and unmanageable case yield to a combination of sedatives, which had resisted the operation of any one or two when given separately. The extract of conium is often

of service in cases of insanity combined with epilepsy; conjoined with mineral tonics, conium is occasionally of benefit, particularly in melancholia connected with chronic disease of the digestive organs and with neuralgia. In cases of uterine irritation, I have seen great good result from the combination of hops, camphor, and hyoscyamus. In illusions of vision, belladonna, commencing with quarter-grain doses, will be found a useful remedy. In insanity complicated with dysmenorrhœa, the combination of camphor with hyoscyamus, opium, or conium, may be given with great advantage. The hydrochlorate of morphia, in union with dilute hydrochloric acid, is said to be useful in cases where the sedative treatment is desirable. I am often in the habit of exhibiting sedatives and tonics in combination, particularly conium with iron, opium with quinine, or with the infusion or compound decoction of cinchona. In debility, with irritability of the nervous system, accompanied by restlessness, Battley's solution, with the preparations of cinchona, will often prove of great benefit. The tincture of sumbul I have occasionally administered, and I think with advantage, in paroxysmal or convulsive forms of insanity. I have given it to the extent of one or two drachms for a dose. In hysterical derangement, the tincture of Indian hemp will occasionally allay the excitement, and produce sleep more rapidly than any other form of sedative. The valerianate of zinc has not answered the expectations of those who have spoken so highly of its medicinal virtues. Tincture of opium with camphor, and the tartrate of antimony, is an excellent combination in cases of doubtful cerebral congestion. Tincture of hops, in doses of from one to four drachms, may be necessary, when no other formulæ are admissible. As mild forms of sedative, compound ipecacuanha powder, extract of lettuce, and the syrup of poppies, are occasionally recommended; a good substitute for Dover's powder is a pill composed of opium, ipecacuanha, and soap.

The more chronic forms of insanity, particularly melancholia, are occasionally difficult of cure. Owing to the slow, obscure, and insidious character of the disease, the mental affection has generally been of some duration before the attention of the practitioner has been directed to its existence. As this form of derangement generally exhibits itself in trifling perversions of the affections and propensities, leading to little acts of extravagance and irregu-

larity of conduct, associated with great depression, we often find the attack has existed some years before a necessity has been felt for any medical advice or treatment—perhaps a suicidal propensity has manifested itself, this being the first apparent overt act of insanity.

It is necessary, before suggesting any course of treatment in melancholia, to ascertain whether any latent visceral disease be present. Occasionally, the local irritation will be found either in the liver, the stomach and bowels, or uterus. In the religious and other forms of melancholia in females, the delusions are often associated with uterine irritation; and under such circumstances, if actual physical derangement of an active character exists in this organ, the best treatment will be, the application of leeches to the neighbourhood of the uterus, combined with warm hip-baths, sedatives, and mineral tonics. In cases of melancholia, the digestive functions are often much deranged, the circulation, languid, the skin cold and flaccid, the secretion vitiated. These symptoms are often conjoined with a general loss of the *vis vitæ*. Such patients require generous diet, good air, gentle exercise, and occasional stimuli. When dyspeptic symptoms are combined with an inactive state of the bowels, I have often administered the compound tincture of guaiacum with great benefit. It is important to watch the particular features in these cases, and to improve the general health by the exhibition of mild alteratives and vegetable tonics, with alkalies. I have occasionally administered, with success, in this form of insanity, apparently associated with an abnormal condition of the nutrition of the brain, cod-liver oil, with preparations of iron.

My time will not admit of my submitting for your approval the treatment best adapted for those forms of the mental disease associated with an atrophied or softened condition of the nervous matter. I think more is to be done for the cure of these cases than the writings of medical men would lead the student to suppose, particularly if the disease be seen and subjected to treatment in the early stages. I have recorded the details of several instances of cerebral disease, exhibiting all the legitimate features of ramollissement, and yielding to the persevering administration of the preparations of iron, phosphorus, zinc, and strychnia, combined with generous living, and the occasional application of a leech behind the ear, should indications of

cerebral congestion be present.* I have also derived benefit from the use of the milder forms of mercurials, associated with cinchona. In cases of impairment of the mind, loss of memory, defective power of attention, occasional paroxysms of *mental* paralysis, unconnected with lesions of the *motor* power, I have found a solution of the acetate of strychnine, and a solution of the phosphate of strychnine, of great advantage.

In some chronic forms of insanity, in dementia, and persistent monomania, connected, as it was supposed, with morbid thickening of the dura mater, and with interstitial infiltration of the membrane, as well as with exudations upon its surface, I have occasionally had the head shaved, and have perseveringly rubbed over the scalp a strong ointment of the iodide of potassium combined with strychnine. In other instances I have kept the head painted with the mixture of iodine. I have seen marked benefit from this mode of treatment. When the mental symptoms are supposed to be associated with effusions of serum, I have ordered the iodine to be applied externally, at the same time exhibiting minute doses of calomel, or mercury-with-chalk, to slightly affect the system: this, conjoined with occasional tonics, diuretics, and stimuli to support the vital powers, is occasionally productive of considerable benefit, in cases apparently placed quite beyond the reach of improvement or cure.

I have briefly referred to two distressing and often unmanageable forms of insanity—viz., of *suicidal mania*, and of those cases where the *patient obstinately refuses to take either food or medicine*. In insanity associated with suicidal tendencies, it is important to ascertain whether any cerebral congestion exists. If such be the case, a few leeches applied to the head, followed by an active cathartic, will relieve the local irritation, and often dissipate the idea of self-destruction. In the absence of any positive active cerebral symptoms, the prolonged hot bath, and the persevering exhibition of some form of sedative, is the best treatment to be adopted. I have seen the suicidal impulse removed after the administration of a few doses of belladonna; but the meconite and hydrochlorate of morphia, if given for a sufficient length of time, will, in the great majority of cases, distinct from actual incurable visceral or cerebral disease, effect a cure. Occa-

* In 1830, twenty-four years ago, my first observations on "Ramollissement of the Brain" were published in the *Lancet*.

sionally, the shower-bath, and counter-irritation in the vicinity of the head, will aid us in re-establishing health. Cases sometimes present themselves where the patient obstinately refuses to take either food or medicine. This character of case gives much anxiety. The refusal of food may be connected with the intention to destroy life, or it may be associated with and caused by delusive impressions. I am inclined to believe, that, in the majority of these cases, the symptom is the result of some irritation existing in the great ganglionic centres remote from the sensorium, affecting by direct action the organ of thought. Upon examination, we often find, in these cases, great gastric derangement, obstinate constipation, considerable tenderness upon pressure in the epigastric region, hepatic disease, the tongue foul, breath offensive, and other symptoms of derangement of the chylopoietic viscera. The determination to resist nourishment arises, under such circumstances, from a *positive loathing of food—a want of all inclination for it*. I have seen cases where it has been deemed necessary, in order to prolong life, to introduce food forcibly into the stomach, speedily cured by the adoption of means calculated to improve the general health and digestive organs. Mild alteratives, vegetable tonics, blisters over the region of the stomach, if the patient complain of pain in that region upon pressure, the warm and shower bath, are the most successful remedies to adopt in cases connected with obvious visceral derangement. Instances sometimes occur, where the refusal of food is clearly traceable to the presence of a delusion—an hallucination of taste, which makes everything appear to the patient bitter, disgusting, and poisonous. The unhappy patient often imagines that he is commanded, either by good or evil spirits, not to eat. These patients must be treated upon general principles, and the remedies be adapted to the peculiar character of each individual case. Under such hallucinations of taste, patients often swallow the most extraordinary articles. The case of a lunatic is recorded, who imagined that his stomach required to be strengthened with iron. He was seized with inflammation of the œsophagus, of which he nearly died. He then confessed that he had swallowed the blade of a knife. After his death, there was found in his stomach seven oxidated lath nails, each two inches and a half long; thirty-three nails, two inches long; forty-nine smaller iron nails and rivets; three pieces

of wound-up iron wire ; an iron screw, an inch long ; a brass image of a saint ; part of the blade of a knife ; and other articles ; amounting in number to 100, and weighing about twenty ounces. It will be necessary, in cases like those to which I have been referring, to ascertain whether the determination not to eat is the effect of such perversions or hallucinations of taste.

I can only in this lecture allude in general terms to the importance, as a principle of treatment, of the administration of tonic remedies, active exercise in the open air, and to good and generous living. It is rarely necessary, in the treatment of insanity, to deprive the patient of animal food. Individual cases occasionally come under our notice, in which it is indispensable, for a time, to enforce a farinaceous diet ; but such is not often our duty. Among paupers, insanity is frequently cured by the free use of good animal food, and a generous supply of porter. Even when we are satisfied of the necessity of local depletion, it will often be requisite to give wine, and allow the patient a generous diet.

There are many other essential points in connexion with this important, this vast subject, which I am reluctantly compelled to pass entirely over. When I had resolved to bring this matter before the profession, I quite despaired, in the time allotted for *one* lecture, of being able to skim even upon the surface of the many deeply interesting points involved in the inquiry ; but feeling—deeply, earnestly feeling—that, in relation to my own speciality, the subject of the medical treatment of insanity was of the first moment, of the most vital importance, to the profession as well as to the public, I did not hesitate in selecting this topic for one of my lectures, feeling assured that you would kindly make allowance for all imperfections, and generously appreciate the difficulties I had to encounter in concentrating in one short lecture a faint glimpse or shadow of a subject requiring for its successful exposition nine or ten lectures, equal in length to the one I have had the honour of reading this evening. I may have formed an extravagant and exaggerated conception of this subject, but I cannot close my eyes to the *fatal consequences which have so often ensued from a belief in the incurability of insanity by medical means*. In all grades of society we witness the pernicious, the fatal, the disastrous effects of this dogma. We see it influencing the conduct of county magistrates in the architec-

tural proportions, medical organization and general arrangements of our great national asylums. We also perceive the consequences of the error operating in many of the private institutions for the treatment of the insane, thereby degrading them into places of detention, instead of conferring upon them the character of HOSPITALS FOR THE CURE OF THE INSANE, under the supervision of medical officers, well trained, by preliminary education, for their important vocation, acquainted with the philosophy of the human mind, and fitted by the character of their *heart*, as well as by the vigour of their *intellect*, for the right performance of the solemn and responsible duties entrusted to them by the public and the legislature.

Original Communications.

THE PSYCHOLOGY OF OPIUM EATING.

BY JAMES BOWER HARRISON, F.R.C.S., &c.

Corresponding Member of the Epidemiological Society, &c. &c.

OPIUM! *opos*, the juice, *par excellence*! Who has not some recollection of opium? The very name brings to the mind the sick-bed of former years. The little night-draught which, with magic spell, relaxed the severity of pain, and chased away the clouds which hung over the serenity of the mind. We still remember how the kind nurse came with friendly and female care to administer the potion, and how, as night wore away, the anguish was softened—and curious faces seemed to peep round the curtains of our beds, and fancies, alien to our accustomed thoughts, mingled in our dreams until consciousness was lost, and blessed sleep for a while prevailed over the tyranny of disease. We are familiar, indeed, with these effects, but there is something very remarkable in them. That ease should be procured by the juice of a poppy! that the wonderful mind should be influenced by a cause so apparently insignificant! The great John Hunter exclaimed, Thank God for opium! and it is an undoubted blessing that the Creator should have permitted such an antidote to the sufferings of mankind.

How extraordinary is the human mind! how elevated in comprehension,—how godlike in sympathy,—and yet the human mind may be rendered joyous or fierce, wild or torpid—foolish or entranced, by such agents as alcohol or opium! Spiritual, indeed, we are, but how curiously is our spirituality mixed up with the gross and material. A miserable and despairing being, shall, under the influence of such an agent, be transferred to a paradise of joy, and yet his real condition be not a whit the less destitute. After all, there is something more in this than our philosophy can reach, but it teaches one piece of philosophy, that it is the state of the mind, rather than external circumstances, which constitutes happiness.

In this country opium is taken in the majority of instances for the purpose of obtaining sleep, or mitigating pain, or obviating the effects of exhaustion and loss of blood. But it seems also to have a singular effect on the human mind in exalting the ideas, and producing visions—an effect which has been rudely, and perhaps somewhat wrongly, compared to intoxication—of this latter property, medical writers have not entered very largely; for their experience has obviously been chiefly of its narcotic qualities, both from the mode in which they have administered it, and the intention which they have had in view. It seems that if opium is taken in comparatively small and frequently repeated doses, it produces excitement and pleasurable feelings before it occasions stupor. The capability of receiving excitement from it is probably increased by habit, somewhat in the same manner that alcoholic liquors give most pleasure to those who are in some degree habituated to them. Certain constitutions are, also, no doubt more favourable to the production of these effects than others. It is only by such considerations that the surprising effects related of opium eating in the East, can be reconciled to the experience of the profession at large in this country. But if the effects of opium are thus pleasurable in the first instance—the necessity of continuing the stimulus—the slavery of habit (the most abject of all slaveries) and the degradation and wretchedness which eventually ensue, are a terrible punishment. How dreadful the tyranny of a habit which insensibly coils itself, like a deadly snake, round the victim which it fascinates, until escape is impossible. Education, talents, refinement of mind, all are in vain—the embrace of the

destroyer is in too many folds to be untwisted ;—at length the fascination is gone, and the glaring eyes of a fiend are upon him for ever. Even sleep—that balm of hurt minds—that nurse of nature—that chief nourisher in life's feast—even sleep is gone, and all the pure affections are poisoned, or turn to bitterness ;—the simplicity of children,—the love of woman,—the peacefulness of religion—they are no more.

We shall consider these effects chiefly as they are evidenced in two memorable instances, which are, indeed, the type of others and of all. Every one knows that in the East, the exhilarating properties of opium have been greatly abused. Mr. Madden, in his "Travels in Turkey," &c., gives a brief description of the opium eaters in Constantinople. The coffee-houses in which they assemble, are situated in a large square, and on the benches outside the door they sit and indulge in the reveries to which the drug gives rise. He states that their gestures were wild, their features flushed, and their talk incoherent. Some, however, addressed eloquent discourses to the bystanders, and others appeared to be enjoying the most beatific ideas. Mr. Madden was himself desirous of experiencing the effects. He first took one grain of opium, but an hour and a half elapsed without any perceptible effect. The keeper of the coffee-house wished to give him two grains more, but he only consented to half this quantity. However, he subsequently took an additional quantity of two grains, and then he became sensibly excited. Everything now appeared enlarged in volume—there was a sort of curious expansion of mind and matter. But Mr. Madden discovered that the pleasure was chiefly derived from external objects, and that when he closed his eyes the same feelings were no longer excited. He now determined to make his way home as fast as possible, but as he went he feared to commit some extravagance. He was hardly sensible that his feet touched the ground, but seemed to slide along as if propelled by some invisible agency, which rendered his body lighter than the air. The moment he got home he went to bed, but the same delightful visions filled his mind all the night. The next day, however, he rose pale and dispirited, with headache and feebleness, so that he was all that day confined to the sofa. Mr. Madden speaks of the practice as extremely injurious to the opium eaters themselves—they lose their appetites—become feeble and tremulous—their necks wry, and their fingers contracted—they are perfectly miserable until the hour arrives for the gratification of their indulgence. Dr. Oppenheim, a German writer, makes a similar statement—"The habitual opium eater," says he, "is instantly recognised by his appearance—a total attenuation of body, a withered yellow countenance, a lame gait, a bending of the spine, frequently to such a degree as to assume a circular form, and glassy deep sunken eyes, betray him at first glance."* Dr. Oppenheim mentions that the habit is almost impossible to break, but those who make the attempt, ingeniously mix their pills with wax, and daily diminish the quantity of opium until nothing but the wax remains.—But I shall now pass on to give some notice of the life of a great poet, Samuel Taylor Coleridge, a man of uncommon talent and extensive learning. Perhaps it may be remembered that he was the author of that wild but beautiful poem, the "Ancient Mariner," which begins in this curious strain:—

"It was an Ancient Mariner,
And he stoppeth one of three ;
By thy long gray beard, and glittering eye,
Now, wherefore, stopp'st thou me."

I shall not pretend to give any regular account of the life of Coleridge, but content myself with such few particulars as may give interest to what follows :—Coleridge was born in Devonshire, and was the youngest son of the Rev. John Coleridge, who was the Vicar of the parish of St. Mary Ottery, his native place.

* See Pereira, "Materia Medica," vol. ii. p. 1746.

His education was first conducted at Christ's Hospital, and subsequently at Cambridge, under the Rev. James Bowyer. There is something singular in the fact, that Mr. Coleridge, like Mr. De Quincey, ran away from his scholastic pursuits. During the time that Coleridge was at Cambridge, he fell in love with a young woman, who rejected his addresses. This produced so much effect upon his mind that, in a fit of despondency, he ran away to London. Here he enlisted as a common soldier, in a regiment of horse, assuming the somewhat awkward name of Silas Tomken Cumberbatch. Mr. Coleridge was far from acquitting himself well in this new capacity. He was unable to rub down his horse with credit, and is said to have been assisted by a companion, in return for which service, he wrote love stanzas, that his friend might appear well in the eyes of his sweetheart. He did not succeed much better as a rider than as a groom, and sometimes, to the amusement of his associates, in mounting on one side of his horse he fell over on the other. The manner in which he got extricated from his military service is on a par with the rest of his adventures. One day he happened to hear some of the officers quoting, or rather mis-quoting, a passage of Euripides, and touching his cap, he ventured, in a very respectful manner, to set them right. This, of course, led to inquiry as to his former life, and in the end he was taken to the medical department at the hospital, from which his friends ultimately removed him. Mr. Coleridge, in his literary biography, gives us an amusing picture of his early efforts to establish himself in life. He was persuaded, in the first instance, to commence a periodical under the title of the "Watchman," and set out to Birmingham to solicit subscriptions. He had first an interview with a tallow-chandler, to whom he expatiated on his project. But the tallow-chandler was a man on whom all the rhetoric of Coleridge was lost. "And what, sir," he said, after a pause, "might the cost be?" "Only fourpence," replied Coleridge; "and O!" he adds, "how I felt the anti-climax, the abysmal bathos of that fourpence. Only fourpence each number, to be published on every eighth day." "That comes," said the chandler, "to a deal of money at the end of the year, and how much was there to be for the money?" "Thirty-two pages, sir, large octavo, closely printed—thirty-and-two pages." "Bless me! why, except what I do in a family way on the Sabbath, that's more than I ever reads, sir, all the year round. I am as great a one as any man in Birmingham, sir, for liberty and truth and all them sort of things; but as to this (no offence, I hope, sir,) I must beg to be excused." Coleridge soon found that to be an author by profession is to live a most arduous as well as unprofitable life, and he writes feelingly upon this point in the way of advice to others. He had soon an amusing proof of the unsaleableness of his own writing, for rising one morning earlier than usual, he found the servant girl lighting the fire with an extravagant quantity of paper. On offering a gentle remonstrance, poor Mary replied, "La! sir! why, it's only the *Watchman*." I need not here enter into a systematic account of the various publications which established the fame of Coleridge; the success of his literary and poetical career is sufficiently known to the world. But talents and learning do not ensure happiness nor prosperity. The excitement of genius is not always compatible with the tranquillity of domestic life, nor always consistent with the steady progress of pecuniary advancement. The subtleties of metaphysics, and the grandeur of poetical conceptions, did not avail Coleridge in the acquisition of fortune. He began to experience the pressure of poverty, but he also experienced a greater misfortune in seeking to restore his bodily and mental energies by recourse to opium. To how great an extent he carried this habit will shortly appear from some letters which are published by his friend, Mr. Cottle, in his "Early Recollections of Coleridge." Mr. Cottle apologises for offering these letters to the public, on the ground of their extreme value; and indeed it was the expressed wish of Coleridge that his example should, as far as possible, be made a warning to others. Mr. Cottle states, that as soon as he suspected the real

nature of Mr. Coleridge's misfortunes, and their connexion with his practice of opium eating, he wrote him a long and earnest letter, begging him to renounce the dreadful habit; and so greatly was Mr. Cottle struck with the importance of the revelations to which his letter led, that he says, speaking of his account of Mr. Coleridge's infirmity—"It is consolatory to believe, that had I written nothing else, this humble but unflinching narrative would be an evidence that I had not lived in vain."* The following is the reply which Mr. Coleridge addressed to Mr. Cottle:—

"April 26th, 1814.—You have poured oil in the raw and festering wound of an old friend's conscience, Cottle! but it is oil of vitriol! I but barely glanced at the middle of the first page of your letter, and have seen no more of it—not from resentment (God forbid!) but from the state of my bodily and mental sufferings, that scarcely permitted human fortitude to let in a new visitor of affliction. The object of my present reply is, to state the case just as it is—first, that for ten years the anguish of my spirit has been indescribable, the sense of my danger staring, but the consciousness of my guilt worse, far worse, than all! I have prayed with drops of agony on my brow; trembling, not only before the justice of my Maker, but even before the mercy of my Redeemer. 'I gave thee so many talents, what hast thou done with them?' Secondly, overwhelmed as I am with a sense of my direful infirmity, I have never attempted to disguise or conceal the cause. On the contrary, not only to friends have I stated the whole case with tears, and the very bitterness of shame; but in two instances I have warned young men, mere acquaintances, who had spoken of having taken laudanum, of the direful consequences, by an awful exposition of its tremendous effects on myself. Thirdly, though before God I cannot lift up my eye-lids, and only do not despair of his mercy, because to despair would be adding crime to crime, yet to my fellow men I may say, that I was seduced to the accursed habit ignorantly. I had been almost bed-ridden for many months with swelling in my knees. In a medical journal, I unhappily met with an account of a cure performed in a similar case (or what appeared to me so) by rubbing in of laudanum, at the same time taking a given dose internally. It acted like a charm, like a miracle! I recovered the use of my limbs, of my appetite, of my spirits, and this continued for near a fortnight. At length the unusual stimulus subsided, the complaint returned,—the supposed remedy was resorted to—but I cannot go through the dreary history. Suffice it to say, that effects were produced which acted on me by terror and cowardice of pain, and sudden death, not (so help me God!) by any temptation of pleasure, or desire of exciting pleasurable sensations. On the very contrary, Mrs. Morgan and her sister will bear witness so far as to say, that the longer I abstained, the higher my spirits were—the keener my enjoyments—till the moment, the direful moment arrived, when my pulse began to palpitate, and such a dreadful falling abroad, as it was, of my whole frame, such intolerable restlessness and incipient bewilderment, that in the last of my several attempts to abandon the dire poison, I exclaimed in agony, which I now repeat in seriousness and solemnity—"I am too poor to hazard this." Had I but a few hundred pounds; but £200, half to send to Mrs. Coleridge, and half to place myself in a private *mad-house*, where I could procure nothing but what a physician thought proper, and where a medical attendant could be constantly with me for two or three months (in less than that time life or death would be determined), then there might be hope—now there is none!! O God! how willingly would I place myself under Dr. Fox, in his establishment; for my case is a species of madness, only that it is a derangement, an *utter impotence of the volition, and not of the intellectual faculties*. You bid me rouse myself; go bid a man paralytic in both arms to rub them briskly together, and that will cure him. 'Alas!'

* "Early Recollections," page 138.

he would reply, 'that I cannot move my arms is my complaint and my misery.' May God bless you, and your affectionate but most afflicted—S. T. COLERIDGE."

In Mr. Coleridge's account of his melancholy state, we have an admirable description of the peculiar condition into which certain minds may be brought by the influence of habit. He has happily expressed a psychological truth—that there is a form of insanity, or infirmity of mind, which consists in an utter *impotence of volition*: the patient himself is anxious to escape the dominion of some particular propensity, and is alive to the imbecility under which he labours. Thus, many have felt compelled to shelter themselves under the protection of stronger or better regulated minds, and even found satisfaction in yielding their liberty for the safety they acquired in return. Perhaps no subject is of more importance than that of the dominion of habit. It is strange to think that the strongest habits have been built up by separate and isolated instances. We suppose that we can do wrong as long as we choose, and withdraw unhurt. We contemplate the monster afar off, whilst the infernal web is being spun around us, and when we seek to retire we are engaged in its interminable toils. Each act by which the habit was acquired was of our own free will, but being acquired, our will seems suspended. The acts are then half involuntary, and the mind is only partially cognizant of them, or impotent to oppose them. Happily in some cases strong and well directed efforts break the chains which bind the victim, but more often the mind sinks in weak and ineffectual struggles—contemplating its own misery whilst passing into the jaws of destruction. Yet there is this consolation in the law of habit, that it may lead to good as well as bad results.

"That monster custom, who all sense doth eat,
Of habit's devil, is angel yet in this :
That to the use of actions fair and good
He likewise gives a frock or livery
That aptly is put on."

It would be a curious subject to speculate as to the number of repetitions which are necessary to constitute a habit, but however interesting such speculation might be, we must here return to the unfortunate Coleridge. In another letter, he says,—“Dear Cottle,—I have resolved to place myself in any situation, in which I can remain for a month or two, as a child, wholly in the power of others. But alas! I have no money! Will you invite Mr. Wood (a most dear and affectionate friend to worthless me); and Mr. Le Breton, my old school-fellow, and likewise a most affectionate friend; and Mr. Wade, who will return in a few days; desire them to call on you any evening after seven o'clock that they can make convenient, and consult with them whether anything of this kind can be done. Do you know Dr. Fox? Affectionately, S. T. C.

“I have to prepare my lecture, oh! with how blank a spirit!”*

It is indeed lamentable to see the fine talents of Coleridge thus reduced, and his very capability of writing rendered abortive by internal misery. “I cannot” (says he, in one place) “as is feigned of the nightingale, sing with my breast against a thorn.” We see him with health destroyed, money wasted, and domestic happiness sacrificed, oppressed with debt, and with independence gone. He who carried away prizes at the University, and was the admiration of all who could estimate genius. Who shall say he is safe, if genius can thus succumb? His “tottering step and glassy eye” told of the miserable servitude into which habit had drawn him. Sir Humphrey Davy had well described the instability of his mental constitution, when he compared “the brilliant images of greatness which floated on his mind” to the images of morning clouds mirrored on the waters, “which are agitated by

* “Early Recollections,” page 162.]

every breeze, and modified by every sunbeam." It may be supposed that strenuous efforts were made by Mr. Coleridge's friends to reclaim him. Medical assistance was procured, and by the kind intervention of Mr. Josiah Wade, of Bristol, a respectable person was procured to live with him, and exercise a constant surveillance over him, both by night and by day. But even this plan failed, for, as Mr. Coleridge confessed afterwards, he managed still to obtain the laudanum by secret and dexterous means. On one occasion as he was passing along a quay with his attendant, he pointed to a ship, and requested the man to see whether it was an American vessel. The man assured him that it was not, but being requested to step over and ascertain, he left Mr. Coleridge for a short time, during which Mr. Coleridge ran to a druggist's and obtained a supply of laudanum in a bottle, which he always carried in his pocket. Amongst the kind friends who generously aided Mr. Coleridge with pecuniary assistance, was Mr. De Quincey, the well-known author of the "Confessions of an Opium Eater." Mr. De Quincey early discovered the talents of Mr. Coleridge, and learning from Mr. Cottle that he was in embarrassed circumstances, at once offered him £500. Mr. Cottle thought the sum too large to be presented in the first instance, and it was finally arranged that £300 should be given. Mr. De Quincey, with the delicacy characteristic of his gifted mind, desired that his own name should not transpire, and that the present should be made as coming from an unknown admirer of the genius of Coleridge.—The quantity of laudanum which Mr. Coleridge took was amazingly large, and consequently the expense considerable. For years, the purchase of opium had exceeded £2. 10s. per week. He was in the habit of taking from two quarts of laudanum a week to a pint a day; and on one occasion he had been known to take a quart of laudanum in twenty-four hours.* These statements would almost appear incredible, even upon the respectable authority of Mr. Cottle, were it not for some similar accounts given by the distinguished toxicologist, Dr. Christison, and the late eminent Dr. Pereira.—I must be pardoned one more quotation, for the following letter is so valuable that I cannot bring myself to omit it. It is addressed to Mr. Wade, and is dated Bristol, June 26th, 1814,—“Dear sir, for I am unworthy to call any good man friend, much less you, whose hospitality and love I have abused; accept, however, my entreaties for your forgiveness and your prayers. Conceive a poor miserable wretch, who for many years has been attempting to beat off pain by a constant recurrence to the vice that reproduces it. Conceive a spirit in hell, employed in tracing out for others the road to that heaven from which his crimes exclude him! In short, conceive what is most wretched, helpless, and hopeless, and you will form as tolerable a notion of my state as it is possible for a good man to have. I used to think the text in St. James, that ‘he who offended in one point offends in all,’ very harsh; but now I feel the *awful, the tremendous truth of it*. In the one *crime of opium*, what crime have I not made myself guilty of? Ingratitude to my Maker! and to my benefactors—injustice! and unnatural cruelty to my poor children! Self-contempt for my repeated promise-breach, nay, too often actual falsehood! After my death, I earnestly entreat that a full and unqualified narration of my wretchedness, and of its guilty cause, may be made public, that, at least, some little good may be effected by the direful example! May God Almighty bless you, and have mercy on your still affectionate and, in his heart, grateful,—S. T. COLERIDGE.”†

This letter is worthy of being preserved, if for no other, for this reason, that it bears evidence of the sacred truth—that if we would be virtuous and happy, we must make no exception for a favourite vice—for a *venial* fault—

* “Early Recollections,” p. 169.

† It is pleasing to be able to state that Coleridge eventually overcame the habit of opium taking.

one break in the harmony of virtue, and the whole is unhinged—one link unfastened, and the whole chain falls into pieces. Let no one think that he will be good, *with one exception*. If we offend in one point, we shall soon offend in all, for the fine sense of right is gone, and the integrity of virtue can bear no division. Coleridge died on the 25th of July, 1834, having written for himself the following epitaph.

“Stop, Christian passer-by! Stop, child of God!
And read with gentle breast.—Beneath this sod
A poet lies, or that which once seemed he;
Oh, lift a thought in prayer for S. T. C. !
That he who many a year with toil of breath
Found death in life, may here find life in death !
Mercy for praise—to be forgiven for fame,
He asked and hoped through Christ—Do thou the same.”

It is somewhat remarkable, that one who so destroyed the serenity of his own natural sleep by narcotic drugs, should be the author of these beautiful lines,—

“O sleep! it is a gentle thing,
Beloved from pole to pole.
To Mary, Queen, the praise be given :
She sent the gentle sleep from heaven
That slid into my soul.”

The effect of habitual opium taking, on health and longevity, has been a subject of legal consideration. A remarkable trial took place in relation to some assurances effected by the late Earl of Mar in the Edinburgh Life Assurance Company. The company discovered, on the death of the earl, that he had been in the habit of taking opium to a large amount, and, on that ground, refused to pay the insurance. The case was decided against the company on the presumption that they had not been sufficiently careful in their preliminary inquiries as to his habits. Dr. Christison, who was concerned as a medical witness in this case, was led, in the course of his investigation, to some interesting data, both in respect to the frequency of this habit, and its effect on the duration of life. It must be confessed that, from these inquiries, opium does not seem so rapidly destructive as might be supposed; but there is no revelation made as to the misery in which life was passed; and, in all probability, a vast number of fatal cases have been in more than one sense *buried* in oblivion. However, Dr. Christison's cases are replete with interest, and will be read by those who are concerned in similar inquiries with the greatest advantage. He gives a short statement of the ages of the opium eaters, and the quantities of opium taken. It would appear that many reached advanced periods of life, such as fifty or sixty, after fifteen, twenty, or thirty years of this lamentable practice. One old woman, who died at Leith at the age of eighty, had taken half an ounce of laudanum daily for nearly forty years, and enjoyed tolerably good health all the time. Another, who died at seventy-six, had taken about the same quantity, and for the same time. Very many such statements are made, but I conceive they are exceptions from a general rule, and that the health was by no means so good as was represented; for in some instances these persons are stated to have given up the opium for intervals, which they would scarcely have done if it had contributed to pleasure without impairing the health. Dr. Christison must be himself aware that a long list of drunkards might be made who had escaped the evils consequent on their habits, and who have died at an advanced age. Such statements, however, are interesting chiefly as matters of curiosity; and the example, as the poet says, “more honoured in the breach than the observance.”

The next page in the history of opium eating is revealed in the "Confessions of an Opium Eater." This extraordinary book is written in so pleasing a style, and so nicely blended with narrative, that it is impossible not to be interested with it. The writer, De Quincey, is evidently a man of highly cultivated mind, and of vivid imagination, and has invested the subject of opium with all the charms of elegant composition and powerful delineation. But we cannot avoid feeling persuaded that, in the retrospect of his life and of his feelings, he has given too poetical a colouring to the picture, or at least kept subdued in the background those more repulsive features which startle us in the confessions of Coleridge. Endowed with a fertile mind, and richly stored with the treasures of learning, he had a more than usual proclivity to ideal pains and pleasures; but he has passed over the *common-places* of misery, the degradation of mind which habit imposes, the horror and revulsion of feeling which arise from a perpetual interference with the simplicity of the natural affections. He has touched with a graphic pen the dreams and visions which he experienced; but he has not dwelt on the days of debasing and tremulous prostration which wait on the excitement. He has given, in effect, an air of romance to all, and, with unusual skill, blended his narrative with scenes of exquisite pathos. But for this very reason we are constrained to remember that this story has more of the gloss of fiction than the terror of reality.

When about seven years of age, the opium eater lost his father, and was committed to the care of guardians. They sent him to various schools, and it appears that he obtained a good education, and made considerable progress, especially in the Greek language. As he grew older he was desirous of being sent to college, but in this wish he was not permitted to indulge. The disappointment acting powerfully on his mind, he determined to run away from school; and, about the commencement of his seventeenth birthday, proceeded to put his resolve into execution. Not having money sufficient to carry out his views, he wrote to a lady of rank who had known him from childhood, requesting the loan of five guineas. In answer to this letter, she sent him ten, which immediately decided him to enter upon his adventure. It was not, however, without a sorrowful feeling that he quitted the scene of his youth. "On the evening before I left," says he, "I grieved when the ancient and lofty school-room resounded with the evening service, performed for the last time in my hearing; and at night, when the muster-roll of names—and mine as usual was called first—I stepped forward, and passing the head master, who was standing by, I bowed to him, and looked earnestly in his face, thinking to myself—'He is old and infirm, and, in this world, I shall not see him again.' I was right; I never *did* see him again, nor ever shall. He looked at me complacently, smiled goodnaturedly, returned my salutation (or rather valediction), and we parted, though he knew it not, for ever." The next day he rose at half-past three: it was a beautiful July morning, and there was something which affected him in the quietude of that early hour, with the broad but softened light which shed itself on the adjacent towers. A picture hung over his mantelpiece of a beautiful countenance, which he had often gazed at with a sort of devotion. As he was looking at this picture for the last time, the clock struck four; he went to the picture, kissed it, and gently walked out. He was not destined, however, to make his exit so quietly as he had expected. It was necessary to move a large trunk, which was too heavy to be carried by his own unaided exertion. A servant man had kindly offered to assist him,—a man—

"Of Atlantean shoulders, fit to bear
The weight of mightiest monarchies,"

but the man had the misfortune to slip, and the trunk fell and rolled with great impetus against the door of the pedagogue. For a time they thought that all

was lost, but, curiously enough, the doctor, who was generally a light sleeper, never awoke. He was now launched out on the world. It will easily be supposed that his resources would soon become inadequate to his wants. For some time he wandered about in the mountainous parts of Wales; and at one time supported himself by writing letters for cottagers who happened to have friends at a distance. Once he was entertained some days by a family of young people, for whom he acted as correspondent, and gave great satisfaction by the delicate manner in which he indited love letters for a kind and amiable girl. The parents of these people, however, returning, put an end to his continuance with them. From Wales he contrived to get to London, though he omits to state in what manner; and here his sufferings began in earnest. For upwards of sixteen weeks he was a prey to the most bitter hunger. He slept for a long time in the open air, and subsisted on a precarious charity. At length an individual permitted him to take shelter in an unoccupied house, and there, with a friendless and deserted child, on whom he took compassion, he passed weary days and nights. It seems singular that in this destitute state he did not again have recourse to the protection of his guardians; and he does not give sufficient reasons for his not doing so, as he nowhere states that he was treated by them with any excess of severity. It is probable, however, that a want of sufficient resolution, and a certain dread of again losing his liberty, prevailed over other feelings. It is about this period of his life that he introduces us to a little episode in his history, which is told with such touching simplicity, that it is with reluctance I am led to abridge it. In wandering in the streets of London by night, he had formed a sort of companionship with an unfortunate girl. They sought each other regularly at an appointed place; and her companionship was the solace of his miserable life. The youth of the girl, and the interest she displayed in his misfortunes, gave rise to an attachment of the strongest nature. He never knew more than her Christian name, and, as he always depended upon finding her, he did not think it necessary to learn more.

It happened one day that the opium eater met, casually, with a friend in Albemarle Street, and being recognised, related his history. His friend supplied him with a small sum of money, with which he resolved to visit Eton to see the son of a nobleman, with whom he was acquainted, and through whose means he hoped to effect some monied arrangement on the strength of his expectations. He took leave of Anne (for that was the name of the young woman) as usual, never doubting but that he should find her on his return. When he came back he hastened to the accustomed place, anxious to make known the success of his enterprise, and share with her his amended fortune. In vain he looked amongst the busy throng by the lamplight of Oxford Street. They had parted for ever. Perhaps she was at the very time in search of him also; perhaps a street only divided them. "O, Oxford Street," exclaims he, "stony-hearted step-mother! thou that listenest to the sighs of orphans, and drinkest the tears of children! successors of myself and Anne have doubtless since trodden in our footsteps; and thou, Oxford Street, hast since echoed to the groans of innumerable hearts." After this relation, we are introduced by the opium eater to the commencement of his terrible habit. He caught a violent pain in the head and face from an imprudent application of cold water, and was recommended by a college acquaintance to take opium. This he immediately purchased, and was delighted with the ease he obtained, and the agreeable feelings it produced. He was charmed at the idea that pain could be so cheaply assuaged, and his mind pleasantly excited. He soon became habituated to the stimulus, and thought himself happy in its discovery. Life seemed to have gained new charms, and to present itself in new aspects. Under the influence of opium he saw with a different sight, and heard with different ears. As he went out and mixed with the busy throng of London,

all seemed to wear a fresh and beautiful appearance. At the opera the scene became actually a paradise, the strains of music were heavenly, and the spectacle like a fairy enchantment; even common things lost their grossness; in fact all was seen and felt through a new medium. He wandered in the streets of London whilst under this influence, and took pleasure in everything which surrounded him; for motion itself was pleasure. I may here remark that the opium eater finds fault with the statements which are generally made with respect to opium. He denies that it occasions intoxication, and he is doubtless correct in objecting to this term being applied without due qualification. The pleasure of wine is one that rises to a certain pitch, and then declines or degenerates into stupidity; while that of opium, he asserts, remains stationary for eight or ten hours. Again the influence of wine is of a nature to disorder the mind, whilst opium tends to exalt the ideas, and yet contribute to harmony and order in the arrangement. Nor do we find that *maudlin* character in the excitement of the moral feelings consequent on opium, which so often renders the inebriated an object of ridicule. He further denies that opium produces that subsequent depression which is commonly supposed to follow excitement. He remarks that, in his own case, he always felt unusually hilarious on the day following its enjoyment. In these statements, however, it must be allowed that there is not perhaps that absolute contradiction of medical authority which he supposes. The term *intoxication* may or may not be extended to embrace the ideas of the opium eater, according to the latitude of the definition; and the individual experience of a mind, prone to excitement, cannot be regarded as a certain test of the manner in which others may be affected. Yet it is probable that the ordinary representations of medical writers are somewhat incorrect, and the experience of the profession as to the exciting influence of opium not equally extensive with that of its narcotic and poisonous effects.

Some melancholy event having occurred in the year 1813, tended to confirm the opium eater in his practice of opium-eating, and he soon found the habit so strong that it was almost impossible to avoid the indulgence. Certain uneasy feelings in his stomach also rendered it difficult to tolerate any abstinence from it; and now he began to experience something of the tyranny of the drug. The boundary between his waking and sleeping thoughts seemed broken. The minutest events of his past life came across his mind—his dreams were vivid and terrible, and the ideas which had passed through his mind presented themselves again in fantastic shapes and grotesque figures. But the horrible predominated, and he began to fear sleep. Perhaps, as he somewhere observes, nothing which is once written on the brain is ever actually destroyed. May it not reappear hereafter, as the stars come again into sight when the daylight is gone from the heavens? Some idea of the nature of his dreams may be gathered from the curious notices which he has preserved. From the character of his previous studies, mythological or oriental scenes often tyrannized over his imagination. "From kindred feelings," says he, "I soon brought Egypt and all her gods under the same law—I was stared at, hooted at, grinned at, chattered at, by monkeys, by paroquets, by cockatoos—I ran into pagodas, and was fixed for centuries at the summit or in secret rooms—I was the idol—I was the priest; I was worshipped, I was sacrificed—I fled from the wrath of Brama through all the forests of Asia—Vishnu hated me; Seeva laid wait for me; I came suddenly upon Isis and Osiris—I had done a deed, they said, which the ibis and the crocodile trembled at—I was bound for a thousand years in stone coffins, with mummies and sphinxes, in narrow chambers, at the heart of eternal pyramids. I was kissed with cancerous kisses by crocodiles, and laid confounded with all unutterable slimy things, amongst reeds and Nilotic mud. * * * Over every form, and threat, and punishment, and dim, sightless incarceration, brooded a sense of

eternity and infinity that drove me into an oppression as of madness. Into these dreams only it was, with one or two slight exceptions, that any circumstance of physical horror entered. All before had been moral and spiritual terrors. But here the main agents were ugly birds, or snakes, or crocodiles, especially the last. The cursed crocodile became to me the object of more horror than almost all the rest. I was compelled to live with him; and (as was always the case almost in my dreams) for centuries. I escaped sometimes and found myself in Chinese houses, with cane tables, &c. All the feet of the tables, sofas, &c., soon became instinct with life; the abominable head of the crocodile, and his leering eyes, looked out at me, multiplied into a thousand repetitions, and I stood loathing and fascinated. And so often did this hideous reptile haunt my dreams, that many times the very same dream was broken up in the very same way. I heard gentle voices speaking to me (I hear everything when I am sleeping); and instantly I awoke: it was broad noon; and my children were standing hand in hand, at my bedside, come to show me their coloured shoes or new frocks, or let me see them dressed for going out. I protest, that so awful was the transition from the damned crocodile, and the other unutterable monsters and abortions of my dreams, to the sight of innocent *human* natures, and of infancy, that in the mighty and sudden revulsion of mind, I wept, and could not forbear it, as I kissed their faces." Old scenes would often come across his mind, like the sailing clouds across the sky; sometimes he fancied he was walking in pleasant pastures, and lanes of quiet beauty; and then the picture would change to grander and more imposing objects. Once he thought it was an Easter Sunday, and that he was by his cottage door, and the hedges were rich with roses, and in the green churchyard cattle were quietly grazing, and as he turned to open his garden gate, the scene changed to one of oriental character:—"At a vast distance were visible," says he, "as a stain upon the horizon, the domes and cupolas of a great city; an image, or faint abstraction, caught, perhaps in childhood, from some picture of Jerusalem, and not a bow-shot from me, upon a stone, shaded by Judean palms, there sat a woman, and I looked, and it was—Anne! She fixed her eyes upon me earnestly, and I said to her, at length—'So I have found you at last.' I waited, but she answered not a word; her face was the same as when I saw it last, and yet again how different! Seventeen years ago, when the lamp-light fell upon her face, and for the last time I kissed her lips, her eyes were streaming with tears; the tears were now wiped away; she seemed more beautiful than she was at that time, but in all other points the same, and not older. Her looks were tranquil, but with unusual solemnity of expression; and now I gazed upon her with some awe; but suddenly her countenance grew dim, and turning to the mountains I perceived vapours rolling between us: in a moment all had vanished; thick darkness came on, and in the twinkling of an eye, I was far away from mountains, and by lamp-light in Oxford-street, walking again with Anne, just as we walked seventeen years before, when we were both children." The transformations and variations of these ideal pictures remind us of those dissolving scenes which show us castles turning into landscapes, or trees becoming ships on the expanded ocean. But here and there, amidst the inconsistencies of imaginary things, arises some incident of life, which, seen for a while in its natural beauty, with all the affecting reminiscences of the past, grows suddenly distorted in proportions, and loses itself in frightful forms of squalid poverty and garish misery. Another dream is still more exciting, and will be excused as a further and a graphic delineation of these opiate reveries. "The dream commenced with music, which now I often heard in dreams—a music of preparation and of awakening suspense; a music like the opening of the Coronation Anthem, and which like that, gave the feeling of a vast march—of infinite cavalcades filing off, and the tread of innumerable armies. The morning was come of a mighty day, a day of crisis and of final hope for human

nature, then suffering some mysterious eclipse, and labouring in some dread extremity. Somewhere, I know not where—somehow, I know not how—by some beings, I know not whom—a battle, a strife, an agony, was conducting, was evolving like a great drama, or piece of music, with which my sympathy was the more insupportable from my confusion as to its place, its cause, its value, and its possible issue. I, as is usual in dreams (where, of necessity, we make ourselves central to every movement), had the power, and yet had not the power, to decide it. I had the power if I could raise myself, to will it; and yet again had not the power, for the weight of twenty Atlantics was upon me, or the oppression of inexpiable guilt, ‘deeper than ever plummet sounded.’ I lay inactive. Then, like a chorus, the passion deepened; some greater interest was at stake, some mightier cause than ever yet the sword had pleaded, or trumpet had proclaimed. Then came sudden alarms; hurrying to and fro; trepidations of innumerable fugitives, I knew not whether from the good cause or the bad; darkness and lights, tempests and human faces, and at last, with the sense that all was lost, female forms, and the features that were worth all the world to me, and but a moment allowed,—and clasped hands, and heart-breaking partings, and then,—everlasting farewells! and with a sigh, such as the caves of hell sighed when the incestuous mother uttered the abhorred name of death, the sound was reverberated—everlasting farewells! and again, and yet again reverberated—everlasting farewells!

“And I awoke in struggles, and cried aloud, ‘I will sleep no more!’” How truly might he have said,

“Macbeth hath murdered sleep!

Macbeth shall sleep no more!”

The efforts of the opium-eater to renounce the practice are extremely interesting, and it is to be regretted that he has not written more on *this*, the most important part of the subject. Every one knows something of the pertinacity with which habits remain. The diary which is here given is a singular document, and tells the number of drops of laudanum taken daily during four weeks. It is as follows:—

FIRST WEEK.

Monday, June 24	.....	130
“ 25	.....	140
“ 26	.....	130
“ 27	.....	80
“ 28	.....	80
“ 29	.....	80
“ 30	.....	80

SECOND WEEK.

Monday, July 1	.....	80
“ 2	.....	80
“ 3	.....	90
“ 4	.....	100
“ 5	.....	80
“ 6	.....	80
“ 7	.....	70

THIRD WEEK.

Monday, July 8	.....	300
“ 9	.....	50
“ 10	} Hiatus in MS.	
“ 11		
“ 12		
“ 13		
“ 14	.....	76

FOURTH WEEK.

Monday, July 15	.....	76
“ 16	.....	73½
“ 17	.....	73½
“ 18	.....	70
“ 19	.....	240
“ 20	.....	80
“ 21	.....	350

In this detail the relapses will be viewed as the most curious part. But how natural are such relapses to the frailty of human kind! The gnawing sensations which attended a diminution of the opium were almost intolerable, and it was from these feelings, rather than from mental depression, that the difficulty of abandoning it arose.* If we consider the monotony of some

*The writer of an article on Mental Dietetics in the fourth volume of this Journal, says:—“We may truly say that Mr. De Quincey is one of the most remarkable men we had ever the pleasure of meeting: his conversation is always characterised by the clearest reasoning and the happiest choice of language; he is a profound Greek

lives—the anxiety and incessant labour of others—the heart-rending trials which occur in most, and the utter desolateness and despair of a few, it would indeed be a great boon to humanity, if, without crime, without moral and physical degradation, without sinning against the great Creator, it were possible by some means to cheat the mind of its own wretchedness—to forget, even for a time, the evils of the day—"the oppressor's wrong, the proud man's contumely, the insolence of office, and the spurns that patient merit of the unworthy takes." It would be a great boon if it were possible to exalt at will the energies of the mind—to clothe with the treasures of intellectual grandeur the ordinary events of the passing hour, and give increased refinement to every emotion of the heart. But virtue is sacrifice; we cannot thus evade the trials of life, and anticipate a felicity for which our nature is unprepared. We may indeed have a glorious excitement; but soon a feverish perturbation occupies our waking hours, and fearful dreams make horrible our pillows. Then let

"The frame of things disjoint,
Both the worlds suffer,
Ere we will eat our meal in fear, and sleep
In the affliction of those terrible dreams
That shake us nightly."—*Macbeth*.

Higher Broughton, near Manchester.

MENTAL DYNAMICS IN RELATION TO THE SCIENCE OF MEDICINE.

A COURSE OF LECTURES DELIVERED BY M. LORDAT, PROFESSOR OF PHYSIOLOGY
IN THE UNIVERSITY OF MONTPELLIER. ARRANGED AND TRANSLATED BY
STANHOPE TEMPLEMAN SPEER, M.D., CHELTENHAM.

LECTURE V.

GENTLEMEN,—I proceed now to an investigation upon which, I confess, I am somewhat loath to enter, but which cannot be passed over. It consists in endeavouring to appreciate the results of the experiments made by zootomists upon living animals, with reference to the functions of the nervous system; results, be it remembered, which they consider as applicable to human physiology.

You may ask why this repugnance on my part? Listen!—These experimenters have, in my opinion, placed themselves beyond the domains of a science which is of ancient date; which possesses its truths, its fixed principles, its links of co-ordination between facts and principles, a familiar acquaintance with the various species of causality, and of the mode in which the different orders of causes are connected with their respective effects. Instead of taking up this science as existing at present, and perfecting it by means of additional facts (allowing always that such facts are capable of connexion with the fundamental subject of the doctrine itself), they have acted precisely as though it had no existence. Not that they have either censured, approved, or examined it; but as though it had never appeared, they have organized a science after their own fashion, without even previously determining its philosophical aspects, and have proceeded to make experiments more or less difficult, with a view to

scholar, and his erudition extends through the history of all countries; few men are better acquainted with Eastern literature, and although it is some five and twenty years since we were in the habit of frequently meeting him, it gives us unfeigned satisfaction to learn that he has entirely given up the use of opium, and is in the enjoyment of excellent health."—(p. 109.)

In the November number of Blackwood's Magazine, in an article on "The Narcotics we Indulge in," the author makes a similar statement—namely, that De Quincey completely conquered the habit of opium eating.

ascertain the effects produced upon animals by certain impressions made upon certain organs. From the results obtained by themselves and their copartners in this department, there has been deduced a series of general propositions, which now constitute a species of conventional physiology, the terms and dogmas of which seem to possess nothing in common with the corresponding elements of that science which we here cultivate.

How then can we hope to establish an agreement between two sciences which while in truth not dissimilar, either in a subjective or objective point of view, are nevertheless founded on respective bases of so different a character. How are we to translate the idioms of their science into our own language, when they so carefully avoid a dialect which should be common to us both?

Here, then, in a few words, lies the embarrassment and difficulty which I feel while undertaking the investigation in question. True, it might be suggested that the proper method of procedure would be to trouble ourselves as little about their doctrines as they do about ours. But our respective positions are not identical. The experimental school is composed of those who are either strangers to medical practice, or of practitioners who possess the art of separating the practice of medicine from the science of man, so that the practice itself has nothing in common with the doctrine. We, however, would wish conscientiously to do nothing but what we believe, and to believe nothing but what we *know* to be true.

The necessary connexion between science and practice, will not permit us to regard the experimental school with the same indifference which it affects towards us. Being composed of laborious, talented, and honourable individuals, it is very possible that in the results arrived at, there may be found many things, useful and applicable to the science which we humbly endeavour to expound. It would be wrong, indeed, to expose ourselves to the regret of having neglected a well-established scientific fact, whatever be the source from which it may have sprung.

You must consider the following investigation, then, as an act of resignation on my part.

Do not, however, expect me to follow out, one by one, all the propositions of the doctrine which I combat, as a lawyer impugns all the phrases of his adversary's counsel. A refutation in detail would be too long, and not sufficiently profitable, while it might at the same time degenerate into an acrimonious polemic. I simply wish to draw your attention to the more general notions of our modern vivisector's physiology; less, indeed, with a view of attacking these notions, than of placing them in juxtaposition with the fundamental dogmas of our own science, which, thanks to the contrast, you will be able to comprehend.

A knowledge of the human dynamism has ever been with us an object of profound study. What I have already said with reference to the insenscence of man has afforded us another characteristic, inasmuch as this fact concludes the proofs of the duality of our dynamism, and distinguishes it from that of other living beings.

In comparing the two principles of the human-dynamism, it was necessary to ascertain the rank assigned by philosophy to the vital force.

This retrospective view therefore, of our own doctrines, will constitute a favourable opportunity for drawing a critical parallel between the chief propositions respecting the physiology of the nerves, as taught by the vivisectors of the present day, and those homological propositions of medical physiology which have hitherto been expounded in this amphitheatre.

Thus, the general fact of insenscence, the duality of our dynamism, of which that fact affords a strong proof, and the metaphysical character of the vital principle, are the ideas which I have endeavoured to inculcate; bear them therefore constantly in mind during our ensuing meetings, since they constitute the links, whether tacit or textual, of the subjects which I now propose to consider.

As the science of human nature cannot be made up of *à priori* principles, we would wish it to be based on facts alone. The most ordinary phenomena, of every day occurrence, have taught us that man is composed of an aggregate of the physical order, which we have studied in the dissecting-room, and of a dynamism, which is of the metaphysical order, and which can only be studied in the living, acting man, alternately during sickness and health.

Having considered this first division of our subject, we felt the necessity of entering into the details of the system. We saw the material aggregate to be so constituted, that we do not find in it a single molecule whose presence and mode of existence does not require a power for its maintenance and preservation.

There is, consequently, not merely no apparel or organ in the human body, but not even an atom of whose relations in reference to the dynamism, it is unnecessary to be acquainted with, since the absence of that dynamism is infallibly succeeded by a destruction of the aggregate; i. e., a dispersion of its elements.

But how are we to ascertain these relations, between each part and the dynamism at large, if not by contemplating events as they severally occur?

This contemplation is, in truth, Empiricism, taken in its most general acceptation. It may be carried out in two ways, first, by carefully noticing all that passes, whether accidentally or spontaneously, in the system, and by keeping an accurate account of what there takes place. This is called *observation*. Secondly, by pre-arranging conditions and exciting causes, and then examining consecutive phenomena. This is what has been properly termed *experience*. These two methods, viz., Observation and Experience, are indispensable for the construction and extension of the science of man, and of the natural sciences in general.

The process of observation, which we constantly employ, is after all a slow one. True it is, that with patience and attention, science undoubtedly progresses, but the acquisitions which it makes appear at such long intervals, that we might often be tempted to regard it as stationary.

Experience is more expeditious, and consequently the physical sciences, to which it has been applied, have made immense progress in a short space of time. Unfortunately, its application to our department of science, can be but limited and undecided. The most conclusive psychological experiments would frequently be attempts made, not merely against the feelings but against the very existence of the subject, and consequently, if man be that subject, the trial must always be barbarous and often criminal.

It has, however, frequently suggested itself to the minds of members of our profession, that certain preconceived and decisive experiments might be made upon animals. But previous to undertaking such experiments they have generally deemed it necessary to reflect beforehand upon the value of the anticipated result; and this reflection has generally been a discouraging one.

To render such experiments profitable, in relation to medical physiology, it would require an amount of analogy between the subject of such experiment and man, as would approach almost to identity. But where are we to find this analogy? Think for a moment and say if it be possible.

In seeking, then, for such analogy, let us examine the whole extent of the inquiry; what is its purport? Is it not to ascertain the mutual relationships, whether active or passive, existing between a given portion of our body, and the dynamism in general? Do we find in some animal an organ anatomically similar to one of our own? we have but discovered half the analogy; we must further inquire whether the brute dynamism, to which this part has reference, bears a like resemblance to our own dynamism. If we cannot discern this double conformity, the results of such experiments may be useful as regards the physiology of that

particular animal, but they can serve human physiology, only in proportion to the similarity of the metaphysical terms.

Every living animal is, like man, a combination of diverse materials of the physical order, and of a dynamism of the metaphysical order, investing it with a species of unity, which we term *individuality*. This principle, whether simple or compound, gives laws applicable to its own system. These laws constitute its charts and its codes, which require to be studied in due order, and which it would be rash and imprudent to establish upon mere *à priori* reasoning. Naturalists have pretended to divine the economy of a living being from the outline of its body, but they who have studied the dynamism of such beings, know how faulty these pretended conformities have proved. Nothing is more common than to find species, the internal economy and habits of which are in striking contrast with their external configuration.

From what I have said on previous occasions, more particularly in my lectures of the past year, you cannot fail to perceive how greatly the human dynamism differs from that of the beast.

In the beast, as in man, there exists a vital principle, which is self-acting and spontaneous, void of consciousness, endowed with susceptibility and affectability, plus an aptitude for manifesting these properties in various ways. But this susceptibility and affectability differ greatly, according to the species. The salicor, which proves fatal to man, fattens and improves the condition of the sheep; arsenic, which is poisonous in our case, may be given to a lamb with impunity. With reference, moreover, to the various modes of reaction, they are extremely numerous in man, and are subordinate to the different shades of those affective qualities with which the vital principle is endowed, while in animals they are exceedingly restricted. In some, nothing beyond motion can be elicited; cold-blooded animals appear unsusceptible of inflammation; while, think on the other hand of the prodigious number of diseases produced in man, sooner or later, as the result of external impressions, and you will at once discern the difference between the vital affectability of a human being and that of a brute. For instance, two similar nerves in the same individual, perform *different* functions, and hold varied relations in reference to the dynamism, inasmuch as the vital force has endowed them with different properties; how, then, can nerves of the same name, and more or less similar in the *different* species, be said to possess the same attributes, the same relations, and the same functions, in regard to their respective dynamisms?

The comparative effect of wounds in man and animals has already shown us what a far greater amount of tolerance (*ευφορία*) exists in the latter, since what is denominated by surgeons, traumatism (*βλάβη* of Galen), is almost unknown in animals, as a consequence of even the severest operations.

We say nought of the degree of vital tenacity, which is extremely variable in different species, without apparent reason. Few animals are cosmopolitan, man alone appearing to possess this privilege. On the other hand, he not unfrequently dies of comparatively limited injuries, while in the tardigrade, called the *Unau*, it is extremely difficult to extinguish life.

Does there exist in animals that relationship between certain organs which we designate sympathy, and which is of so much importance in medical practice? the question is still *sub judice*.

The vital force in man is endowed with a certain degree of instinct or aptitude for performing directly and involuntarily, various automatic acts.

You are aware that respiration, suction, deglutition, the expulsion of excrement, &c., are performed before reason or volition have assumed the initiative. We are especially convinced of the automatic character of these acts, inasmuch as they have been observed in living human monsters, void of either brain or spinal cord—monsters that have been called Amyelencephales, and

in whom it would be impossible to conceive the existence of an intellectual principle.

A comparatively recent occurrence confirms what I have just said. You will find it mentioned in M. Longet's *Anatomie et Physiologie du Système Nerveux*. "A female, with contracted pelvis, became pregnant; after various ineffectual attempts at delivery with the forceps, it was determined to perform craniotomy. Doctor Beyer (who narrates the case) immediately did so, extracted the two parietal bones, emptied the cranium, and removed the child, which was then wrapped in a napkin and thrown into a corner. While the medical attendant was engaged in removing the placenta, he heard a species of murmur, emanating from the spot in which the child had been deposited. In a few minutes a distinct cry was heard. The napkin was opened, and to the astonishment of all present, this acephalous fœtus was breathing, and throwing about its arms and legs; it uttered several cries, and gave sundry indications of life, during the space of several minutes." Bear in mind that the skull was empty, and that consequently the rachidian bulb had no longer existence. This did not, however, prevent the child from breathing and crying.

We have here more than enough evidence to prove the nature of instinct, and its existence as independent of the intellectual principle, but dependent on the vital force. The amount of human instinct, however, is but trifling in comparison to that with which the majority of animals are endowed at the moment of birth. What acts, what functions of relation, do they not perform without need of trial or apprenticeship? This exaltation of an instinctive faculty, of whose existence we are fully convinced, renders it impossible for us to decide whether there be ought but one grand instinct engaged in the exercise of the functions of relation, as occurring in the brute. Spite of our doubts, we nevertheless do not question the existence in animals of a true sensibility, a susceptibility accompanied by self-consciousness. But what is this animal sensibility as compared with that of man? In the former it bears reference to the interests of the vital system alone. A sensation is always either pleasant or painful, that is, favourable or unfavourable to the aggregate; and we know not whether that which does not bear reference to this species of interest, can truly be denominated a sensation. This sensation serves as a guide to the instinct, and nothing further. We have no grounds for believing that it can impart instruction, or produce a combination of ideas from which a thought might suggest itself. It serves to entertain a species of animal memory (if I may so speak), which the instinct recalls at need, whenever the varying conditions of the vital principle render such an act necessary.

Compare, then, this sensibility with that which we possess. The latter is doubtless roused by impressions, whether from without or from within; but as our instinct is so imperfect, it is needful that the intellect should also appreciate the sensation, in order to know how it is to be forthwith responded to. Thus it is, that sensations are in reality wants, which oblige us at a very early period to think, and hence serve as instructors. What a difference have we here, between this species of sensibility, and that of the lower animal at the moment of birth.

Buffon has addressed to us a serious reproach for not attempting to compare accurately the human dynamism with that of the brute. "It is not to be wondered at," says he, "that man, who knows so little of himself, who confounds often his sensations and ideas, and who distinguishes so imperfectly the emanations of the soul from those of the brain, should compare himself to the brute, and admit, between it and himself, nought but a shade of difference, depending upon a trifling excess or deficiency in the perfection of his corporal organs. It is not surprising that he should assert their powers of reasoning, of mutual comprehension and of self-determination, and attribute to them in addition, not merely the very qualifications which he himself possesses, but even

those in which he is deficient. But let man examine and analyze himself thoroughly, and he soon will recognise the nobility of his nature, comprehend fully the existence of his own mind, cease to debase himself, and perceive at a glance the infinite distance which the Supreme Being has interposed between himself and the brute."

This exhortation on the part of the great naturalist, is all but lost upon the school of the Organicists. Cabanis asserts that every sensation produces either pleasure or pain—true, for the brute; to whom sensation is as nothing unless it be immediately conducive or injurious to the maintenance of the aggregate. But, as regards ourselves, how many impressions are neither painful nor pleasurable, but on the contrary, a source of absolute indifference; while, so far as our moral interests are concerned, their appreciation most undoubtedly depends neither upon sensation nor upon instinct, but solely upon reason.

When our sensations are pleasurable, have they aught in common with those of the animal? The animal enjoys them to the utmost, until they have become exhausted. We carefully avoid doing this, and have invented a thousand refinements, if not to augment (for our sensibility has also its limits), at least to prolong and surround them with a species of intellectual value which increases their importance to an almost indefinable extent. We possess an æsthetic for each sense. There is not one, on whose behalf volumes have not been written, in order to multiply its modes of susceptibility, to anticipate pleasure by prevision and preliminary, to increase attention at the moment of sensation, and to prolong the agreeable remembrance of the same. Is there, then, any similarity between these methods of procuring pleasure and the sensation of the brute? The difference truly is so great, that I scarcely venture to apply the term *sensation* as expressive of the conscious susceptibility to external impressions of both man and animals.

Here the comparison between the two terminates: the principle of thought, which is all in all with the former, gives no evidence of existence in the latter. I can only feel certain that a living being thinks, when he can communicate to me his thoughts by a conventional language, whether phonic or aphonic, as I mentioned to you during the past year. The education, so to speak, of the brute, is not identical with ours, since with us, education is a process of instruction, taking place in the intellectual principle; while in the brute, education is merely a mode of forming and fashioning the instinctive propensities; a mode, indeed, which constitutes a species of type, as transmissible by generation as an ordinary morbid process. Finally, do we find in the life of the animal aught that calls to remembrance the coincidence of a principle which, after acquiring its utmost development, becomes aged and degenerate, with another principle possessing the power of self-preservation, and capable of becoming an intelligent witness of the destruction of its own tenement and of the senile extinction of its *biotic* companion? Does the brute enjoy a mental senescence, contemporaneous with the senescence of its vital principle?

No! a principle of intelligence, such as I see and study in man, is not that which animates the brute; and this constitutes, in my opinion, the most striking disparity between the human and the bestial dynamism.

There is, moreover, in connexion with man, a subject which appears to be of great scientific interest. I allude to the laws which regulate the alliance existing between the vital and intellectual principle during the whole course of life; an alliance in which we find, at one time an increased, at another a diminished, amount of co-operation; while occasionally we discern a natural suspension, and even an actual aberration, in their association. This important item of human physiology, constituting as it does, the basis of all theories respecting sleep, somnambulism, delirium, intoxication, morosophy, and

mental alienation, belongs to the science of man alone. You will find nothing in zoological physiology, at all analogous to the facts of which I speak.

It might perchance, however, be objected, that the phenomena designated as sleep and asphyxia in animals, are similar to what take place in man; but I trust ere long to prove that it is not so. In ourselves for instance, the transition from a sleeping to a waking state convinces us that the co-operation of the two principles has been temporarily suspended, and that at the moment of transition the co-operation is renewed. A similar occurrence takes place upon recovering from the attack of some ecstatic disease, from magnetic sleep, or from asphyxia. In every instance of the kind there is a moment of astonishment. "*Where am I?*" either escapes the lips or flashes across the mind. In the feigned fainting fits occurring during the representations of the drama, the individual never fails to express this surprise, which is in truth the inevitable result of an interval, existing between the previous estrangement of the two principles and their complete reunion. A sudden waking out of sleep is always accompanied in man by indecision. I do not believe, however, that this is noticed in animals.

The recovery from a state of asphyxia is never accompanied in man by phenomena similar to what we notice in the recovery of a bird under similar circumstances; as in the experiment of Humboldt, made with a view of testing the effects of galvanism. After having had recourse to the necessary means for producing asphyxia, "I waited," says he, "for the moment at which the subject of experiment, a common linnet, was about to expire. Already its eyes were closed, and it was stretched on its back, while mechanical irritation with the point of a pin in the vicinity of the anus, produced no effect. I hastened to place a piece of zinc in its beak, and another of silver in the anus, and immediately afterwards a communication was established between the metals through the medium of an iron wire. To my astonishment, at the moment of contact, the bird opened its eyes, raised itself upon its feet, and fluttered its wings; it then breathed for six or seven minutes, and expired tranquilly." There was nothing in the case of the bird at all corresponding to the "*Where am I?*" so invariable in man under analogous circumstances.

After such evidence of discrepancy existing between man and animals, what expectations can we found upon the experiments of vivisection; especially when the theory of the animal functions is the question at issue? The similarity actually existing between the two terms of comparison, viz., the animal and the human dynamism, does it constitute anything like analogy? The terms, it is true, are both of the *metaphysical order*, but how far removed from one another!

Such are the reasons why we place but little confidence in the results of vivisection. It may, however, be said—"Suppose that man be an animal, to which an *intellectual* principle has been superadded, remove this principle, which we admit will produce an enormous difference, still the object of this addition is an animal, like others, and you cannot avoid recognising the analogy." But to this I would reply, as I have previously done, that the *vital* element in man differs from that of animals, in its laws, instincts, and susceptibilities. Remember, moreover, that the human vital principle was created the coadjutor of the intellect; and can we imagine that such an auxiliary should be a vital principle similar to that for which in the brute instinct alone suffices to be the companion?

Lastly, if animals really possessed such an analogy to the human species as that their respective physiologies were identical, if their dynamism resembled ours, if they possessed the same susceptibility that we possess,—an intelligent principle, similar to that of the child, or even of the savage, who, according to the assertion of some naturalists, possesses less mental capacity than the elephant or the monkey,—should we have dared to resolve the problem by

means of the scalpel? If their sensibility were identical with that which we possess; if pain, inflicted by the knife, produced in them, trembling, terror, fear of danger, and visions of approaching death, should we I ask, ever have had recourse to a sanguinary experiment? We should, indeed, have feared to become fratricides, and rather have wished the animal to be treated as we would wish the negro to be treated. We have, therefore, but little sympathy with vivisection. If authorised by analogy, it is both criminal and ferocious; and if justified by a difference of nature, it remains objectless and unworthy of confidence.

Knowing then, the reasons which actuate me in the rejection of vivisection as a means of illustrating the human dynamism, it becomes necessary to inquire into the motives of those experimenters who devote themselves with so much zeal to this species of investigation.

And first let me remind you that, with a view of demonstrating the results we may anticipate from experiments made upon animals, I began by discussing our intellectual requirements, our tendencies, our philosophy, and the bias of our mind in the study of medical physiology.

To complete this portion of our subject, let us endeavour to study the vivisectors in the same light; let us see what is their object, what are their preliminary studies, their inclinations, their philosophy, and their mode of applying it.

While then, we, on the one hand, have openly avowed the motives which actuate us, the vivisectors have been much less explicit; and we must, therefore, endeavour to unravel their ultimate designs.

I. I have already stated that the essential object of our studies is the knowledge and legitimate practice of medicine. The importance, therefore, of this profession, authorizes an inquiry into whatever pertains to it; but repudiates all serious efforts of the mind directed to that which is foreign to its interests: being, in truth, a science, of which it may be reasonably said that no servant can serve two masters.

The vivisectors have, however, adopted an additional vocation; they are essentially naturalists. In examining the acts of an animal, they have had the curiosity to inquire into the mechanism of its movements. This is far from what would have been our design, had we become vivisectors; our objects would rather have been anthropological. The difference of the impulsion must then necessarily show itself in all the results accruing from the practice in question.

Our primary course of study, then, has been that prescribed by our model, Hippocrates, viz., an inquiry into human nature. It is from constant attention to this subject, during a period of more than two thousand years, that there has arisen that Hippocratic vitalism which practitioners of medicine tacitly cultivate; and which our own faculty endeavours to preserve, perfect and propagate, with the utmost zeal. For this doctrine the vivisectors have no sympathy: not merely do they ignore its essential doctrine, but they conceive it, moreover, to be other than it actually is.

They nevertheless assert that their efforts are directed to the advancement of medical science; and, in truth, they strenuously endeavour to introduce their results within its domain. This is at least a mode of giving importance to their investigations, of which it remains for us to appreciate the intrinsic value.

Let us not, however, break off all intercourse, merely on account of their distaste for vitalism; such repugnance is rather a reason for hearing them; inasmuch as certain of their results, which actually fortify our own doctrinal views, cannot be suspected of favouritism, always indeed to be dreaded in the recitals of a friend.

You are aware that our mode of procedure, in the research after natural

truths, is that propounded by Bacon in his "Novum Organum." It is that which has always served as a rule in the construction of the Hippocratic doctrine. We start with a number of anthropological facts; and after having classed them according to their mutual resemblances, we ascribe to each class a cause, of which the name expresses but the effects. These names stand for the experimental causes. When the groups are multiple, we compare the different experimental causes, in order to combine those which a more attentive examination has proved to be identical; we segregate those which possess peculiar characteristics, and which it would be impossible to confound, until new facts shall have taught us that experimental causes, different in aspect, may nevertheless be referred to one common cause already known. It is thus that modern chemists proceed: they fear not to multiply experimental causes, apparently distinct, and to give them specific names . . . comparing them only when the number and variety of ascertained facts shall have definitely settled their proper rank and position. These rules have been established with a view of banishing from science all hypotheses and suppositions, inasmuch as they enumber it to no purpose.

The terms, vital force, instinct, susceptibility, irritability, automatism, sensibility, innate principle, volition, human dynamism, &c., have been employed, merely to distinguish the various groups of anthropological phenomena, and to admit of their respective causes being definitely established under certain heads.

The experimenters of whom I now speak, disdain such philosophy; rejecting all experimental causes, ascertained by abstraction alone, they require something more consistent and more corporeal. In default of well-marked physical causes, they willingly content themselves with a very concrete hypothesis, imitating somewhat those savages who, in case of famine, fill their stomachs with earth, which, though in itself useless, serves nevertheless to amuse the organ, at least for a time.

Thus, they have assumed that the nerves and ganglia animate the whole body, "and regulate the functions of the entire economy." But the nerves, as they come under our inspection, do not appear particularly adapted to such a purpose. Again, "in order to explain in man and animals the phenomena of physical existence (*this, be it remembered, is their peculiar mode of expressing themselves*) the majority of authors admit the presence of an imponderable agent, designated by the various titles of, *nervous fluid or agency, nervous power, acting principle of the nerves.*" They are at a loss to know whether it be identical with the electric fluid, or whether it be a fluid *sui generis*; but they cannot do without some imponderable of a physical order.

M. Longet, following the example of M. Muller, has discussed this complex question at considerable length; he fails to resolve it, but lest the mind should lose all hope of discovering a fluid similar to others, belonging to the domain of physics, he thus sums up his chapter:—

1st. "There is no direct proof in favour of the hypothesis, that currents of electricity pass along the nerves.

2nd. "Electricity and the nervous power are not identical.

3rd. "In the present state of scientific inquiry, it would be rash to assert that they are totally different, and possess no analogy with one another."

But I would venture to ask, If there be any great rashness in asserting that the force which produces zoonomic life and the fusiform phenomenon previously described at length, has no radical analogy with electricity?

This partiality for hypothesis, against which Bacon has directly protested, finds support in the example of Descartes, and in that remarkable maxim of his "Natural Philosophy," which appears to me to be fraught with dangerous results, and which, if taken literally, would convert science into romance—"I should feel," says he, "that I had done enough, if the causes which I have

explained should appear to be of such a nature as to produce effects, bearing even a resemblance to those, which we witness around us in the world at large; without inquiring whether it be by these, or by other causes, that such effects are produced. I conceive, moreover, that it is as useful to possess a knowledge of these supposititious causes, as of the actual ones." Heronpon he quotes a passage from Aristotle, which appears to support his views. But I again ask, Can we say that science consists in seeking indifferently for what is true, or for what is merely probable? Happily it is not so before a court of assizes. A crime has been committed, an individual has been accused; the jury is asked whether they feel confident that the said individual is guilty. The answer is not, that his guilt appears certain or probable, it must either be the expression of conscious conviction or silence; and why should it not thus be with regard to science? If not sure of the cause of such and such an effect, you are not obliged to adopt one that is simply probable. Withhold your judgment, and seek more ample information.

III. The distinction between the two classes of causes: viz., those of the *physical* and those of the *metaphysical order*, in the sense understood by Bacon, is rigorously observed among us, as I have already had occasion to observe. It has been stated, that the *metaphysical order* is accepted in this sense, as a category of the natural sciences, having no connexion with the theological sciences. This observation is necessary, inasmuch as, during the Cartesian epoch, metaphysics and theology were associated; while certain modern philosophers of the Epicurean sect take advantage of this past association to deny metaphysics, and to treat them as a mere superstition.

True it is, that in Paris metaphysics have been limited to psychology, and psychology in turn connected with religion. The allegorical tableaux of the latter part of the seventeenth century represent the science of metaphysics as identified with theology. I have already brought this under your notice in the frontispiece of Diderot and d'Alembert's *Encyclopedia*; and I have now before me an engraving of Bernard Picart, published in 1707, the title of which is, *Truth as sought after by Philosophers*. Truth is seen in the distance, while Philosophy is pointing it out to her favourite, Descartes, and to the philosophers of antiquity. The allegorical female figure, representing Philosophy, is adorned with certain attributes, symbolical of its four sub-divisions. She is crowned with stars, in order to designate physics; she holds in her right hand a sceptre, emblem of morals; in the other she holds a serpent, with its tail in its mouth, a symbol of eternity, intending, moreover, to represent metaphysics; while she places one foot upon a touch-stone, to indicate logic, the object of which is to discern truth from falsehood.

This association of metaphysics with the idea of eternity, of the Almighty, and of his relations with man, is an amalgamation whose intent in those days was morally excellent; the connexion is now, however, maintained with perfidious intent.

Let us then revert to Bacon's division, and distinguish physical from metaphysical causes, in that the former first produce their effects without fail or variation, under the same evident conditions; secondly, that they act without relaxation or exaltation of intensity; thirdly, that they are as durable as the bodies from whence such causes spring; fourthly, that they produce phenomena, each of which is isolated and independent both of the past and of the future: while the latter order of causes, viz., the metaphysical, are, first, adventitious as regards their locality, variable in their effects, and consequently prone to contingency; secondly, they are subject to remissions and exacerbations, without extrinsic determination; thirdly, that they are forced to execute a series of successive phenomena, and are condemned to inaction when these have been achieved, in spite of the aptitude of locality; fourthly, that they give rise to phenomena which are connected, like the links of a chain, not of necessity or

in a manner physically indissoluble, but by conventional agreement, with that temporary period, each moment of which has relation to its beginning and end. In a word, let us recollect that the causes of the physical order act *ratione entis*, and those of the metaphysical order, *ratione moris*.

It would appear that the vivisectors generally, have not the slightest notion of this distinction. I have already said that there are some among them who conceive these to be *words without ideas*; but I would ask my auditors if the above distinction be nought but a tissue of words, void of meaning?

Sustaining the character of staunch organicists, they persist in seeing, in the parts upon which they operate, nothing but what comes under the cognizance of their senses, plus the nervous fluid which they have invented. They, nevertheless, occasionally make use of words expressing agencies which they well know not to belong to the physical order. Thus, M. Muller appears to recognise a *principle of life, a mind*. And I have already stated that he expresses his opinion of the unity of the dynamism, both in man and animals, so that he adopts a reversed Stahlism—one single acting cause, one vital force, in which the principles of the intelligence is but an additional faculty. M. Longet, moreover, speaks of *life* and of the *intellect*, which he does not undertake to explain by physics or by chemistry. The theory of an alleged nervous fluid, is termed mechanical; this expression, so rarely employed in reference to the doctrine of the imponderables, and of which the true signification in physics is well known, appears to be doubly incongruous when physiology is the subject under consideration.

The vivisectors imagine that the nervous fluid is produced in the brain and spinal cord, without considering that the vital force is anterior to the formation of the nervous system. The movement of this fluid constitutes the chief subject of their theory, and its authors carefully endeavour to unite in one, both the idea of the phenomenon and that of its alleged cause. Let us here cursorily examine the terms which they employ, in order to express these facts, with the view of supporting their hypothesis.

1st. They assert that there are three species of nerve fibres, of which the first are denominated sensory; the second, motor; the third, excito motor. Each nerve fibre irrevocably possesses certain properties in virtue of its primitive constitution. They start from the periphery, and unite in the cerebro-spinal centre.

In man, an impression, made upon any point of the living system, is felt either by the vital force alone, or by the two principles simultaneously. The former of these phenomena constitutes *susception* or *vital sensation*; the latter is sensation, properly so called. These terms are but the expression of certain facts. The experimentalists call them *centripetal acts*.

When a susception or a sensation takes place in the dynamism, the event is appreciated either for good or evil. An impression is received, which is either favourable or not, and there results as a consequence, an act which expresses the nature of this appreciation. Physicians say that there exists in some part of the dynamism, an irritation, an affection, &c., and the appreciation of the same is expressed by terms, which differ according to its mode of manifestation—*fainting, convulsion, inflammation, instinctive motion, voluntary motion, &c.*; such are the facts. The experimental school designates this appreciation as a conflict between the motor and sensory nerves at their central point of union. With regard to the expressions made use of, in reference to the appreciation of which the motor nerves are capable, they are comprised in the term *centrifugal acts*.

Thus, at every page of their writings do we find a translation into the language of physics, of medical terms, derived originally from that of metaphysics. Nevertheless, there are certain facts which have refused thus to accommodate themselves. We shall have, ere long, occasion to notice these

more particularly; it will, however, suffice to show, that by their own acknowledgment, the vital principle is not of the physical order, and that it acts *ratione moris*, and not *ratione entis*; witness that *solidarity* of organs recognised by M. Longet, a characteristic indeed which is unknown in the domain of physics.

V. This conviction, or at least this attachment of the vivisectioners to their own peculiar tenets, together with the liberty which their philosophy allows of creating hypotheses indefinitely, of dispensing with the necessity of seeking for what *really* is, and of contenting themselves with putting forth that which *might* be, is a frame of mind which appears to be very suspicious, and against which we should be on our guard. It gives me, moreover, a certain distrust of their anatomical discoveries. As these are made only through the medium of the microscope, and as this method of investigation may give rise to many illusions, how can I avoid receiving them with some hesitation, when I find them to be at variance with recognised dogmas?

To establish their doctrine, it should be shown that each nervous filament is independent of its neighbour, from the cerebro-spinal centre to its periphery. . . . General anatomy, however, shows us the anastomoses of the nerve fibres; appearances, therefore, are in favour of the latter.

Again, their doctrine requires that the nerves of the ganglionic system should accompany the blood vessels to their finest ramifications, but the demonstration of this fact is impossible.

In order that the phenomena of innervation should appear to be in accordance with the varied conditions presented by the anatomy of the nerves, they have supposed that the grey matter might explain what has been wanting to their theory; and, consequently, efforts have been made to make of this tissue a system similar to that of the nerves themselves an attempt by no means easy, if faithful to the first precept of anatomy, viz., demonstration.

As for myself, these portentous anticipations appear to have little reference to the fundamental principles of science. Be they as well founded and susceptible of the most unmistakable demonstration as possible, the probability of the doctrine of the vivisectioners would not be enhanced, nor that of ours diminished. The different parts of the material system are but the machinery of which the power and the modes of action are known by certain facts. We shall learn with pleasure every detail concerning the aptitude and characteristics of this machinery, but such knowledge will change nought of what is essential to our scientific edifice. It is not so, however, with their hypothesis. It can only possess a semblance of reality, upon the supposition that this new anatomy should prove to be true. If they succeed in their anatomical enterprise, the hypothesis may still be maintained, but simply as a supposition.

AN ANALYSIS OF GUISLAIN'S WORK ON INSANITY.

(Continued from No. XXIII., page 436.)

SIXTH LECTURE.

Ecstasy considered as a form of mental alienation.

THIS kind of mental disease is related on the one hand to melancholy, and on the other to mania, and also to acute dementia. This affection is exceedingly rare. I have but one example to show you. The term ecstasy is new as regards its application. It is not the ecstasy of novelists and poets, or that excited by certain religious ideas. That is the mystic ecstasy of Calneil; a state so rare that I have never witnessed it. The kind of phrenoplexy I now describe has quite a different signification; it is a somewhat cataleptiform

condition. It strongly approaches to melancholy or to mania. It is the intensity of the cause, the delicacy, the impressionability of the subject which most frequently give rise to the ecstatic form. The physiological phrenoplexy is observed in the man who is thunderstruck, confused, and embarrassed. In the morbid state it is a moral commotion which gives rise to ecstasy.

Is it not remarkable that the French authors have nowhere mentioned this disease? Can it be confounded with stupidity?*

In this singular affection, the functions of sensibility, of mobility, of the intelligence, all are suspended. When the disease presents itself in all its completeness, the patient looks like a statue. The muscular action is not enfeebled, but there is in the contracted muscles a certain tetanic tension. The patient has his eyes open, but does not see; if he winks, it is at very long intervals; he does not answer you, if you question him; he does not move from his place; his skin is insensible; question him during his convalescence, he will tell you he has felt nothing during his illness; he has had no ideas; he remembers nothing. Or else he will talk to you of hummings in the ears, of vertigo, or that he seemed as if he had no head.

All this, you will perceive, reveals a profound moral shock, which suspends the faculties, but which acts upon the muscular tone by stimulating and irritating it; for the muscles, as I have said, are not flaccid; they are firm, and the head is borne uprightly on the neck.

The pulse is sometimes slow, sometimes frequent. The skin is often cold and dry. The evacuations take place at long intervals.

Ecstasy is sometimes a primitive phrenopathy. Then it almost always succeeds to a cause, of which the action is sudden, as, for example, a severe fright.

In other cases it is the consequence of another kind of mental disease. It is not seldom present in the course of melancholy; and it may occur as an epiphenomenon of mania.

The ecstatic condition is distinguished from stupidity, which I shall describe in speaking of dementia. In this last there is a look of astonishment, a state of stupor; in the first there is tension of the whole system, an expression of nervousity.

Catalepsy offers great resemblances to ecstasy. But in ecstasy the disease is continuous, whereas in catalepsy it returns by fits, and leaves the intelligence intact.

The diagnosis becomes difficult when we have to deal with somnambulism accompanied with cataleptiform convulsions. But the aspect of the eyes, which are closed in somnambulists, the course of this condition which alternates with catalepsy, the sleep, the duration of this situation, which ends in a few hours to return afterwards—all this excludes the idea of the mental alienation of ecstasy.

The disease has nothing peculiar from melancholy in its course. Its invasion is usually sudden. It runs through its stages in three, seven, or nine months. More than nine-tenths of the patients recover.

SEVENTH LECTURE.

On the Phenomena of Mania.—Mania is a designation which may lead to erroneous ideas. All maniacs are not irritated, mischievous, or furious, as the word implies. There are maniacs of boisterous hilarity; there are religious, amorous, and vain maniacs. In others, the morbid exaltation is limited to the dominion of one sentiment, of one circle of ideas, of certain special faculties.

* Heinroth, *Seelenstörungen*, 1818. Heinroth alone has given a clear idea of phrenopathic ecstasy, by bringing it within the circle of the mental diseases recognised by him.

Thus, as a general proposition, mania is not fundamentally a state of furor: what it always is, is a mental activity, a state in which the morbid phenomena succeed each other with a certain rapidity.

I will define mania as a disease of the moral faculty, apyretic, irresistible, in which there is exaggeration, exaltation of one or several phrenic functions, characterized for the most part by a state of agitation, or sometimes by a manifestation of action or violent passions.

The most general pathognomonic character of mania consists in exaggeration, exaltation, agitation, aggressive passions. This disease generally carries with it petulance, force, power. It imparts an air of vigour, often of health, and sometimes of youth.

This condition, be it observed, is far from being at all times a complete alienation; it has its shades, its types, its degrees; it often reminds one, in the case of a naturally calm disposition, of the physiological state of another man who is naturally exalted.

Special forms. Monomania considered in mania.

I. A patient affected with tranquil mania without delirium.

Maniacal exaltation of M. Brierre.

Mania—moral monomania.

Mania without delirium of Pinel.

The fundamental character of this affection is a certain excitability of the moral faculty: a state of animation, of increase in the activity of the intellectual acts. It is a vesania characterized by an absence more or less complete of delirious ideas, by the absence of any notable lesion of the memory and of judgment. It is a rudimentary, initial, incomplete state; one of those singular conditions which remind us of moral insanity.

Let us make this patient talk—he will not utter a single irrational word indicating a pathological condition of the intelligence or ideas. In subjects of this kind the diagnosis must be chiefly drawn from the commemorative history; the attendants will inform us in what respect this man is insane. They will tell us that they discover his disease, not in his thoughts, but in his acts, in his desires, in his character. His family will tell us that from timid and silent, this man has become bold and talkative. The change which has come over his manner has struck and terrified his wife and children.

For the most part it is a want of activity, and also extravagant projects which characterize this vesania. Sometimes the morbid exaltation confines itself to an excess of tenderness. In some cases there is a remarkable prodigality in a man habitually parsimonious.

Sometimes mania consists entirely in a change in the care which a person takes in his toilette; sometimes in projects of marriage, frequent walks, religious habits. In some cases the entire disease consists in a more rapid elocution, in a greater emphasis, in greater boldness in the enunciation of ideas, in a disposition to defend untenable opinions, in an extreme excitability, susceptibility, and querulousness.

What indicates that this state is really a disease, is its appearance in phases, and periodically; the disorder, the agitation remarked in the pulse, the anomalous state of the appetite, the absence of sleep, or a sleep that is broken.

But the characters of tranquil mania may be so feebly traced that all the perspicacity of a man of experience is needed to appreciate them at their proper value. There are conditions in this disease in which the intellectual sphere remains absolutely intact, so that the patient preserves the consciousness of his state, and renders an account to himself of the exaltation which masters him.

Some writers have denied the reality of this condition when it is unaccom-

panied by any disorder of the intellectual functions; they have said: We do not understand the morbid exaltation of the desires, of the character of the man, of his passions, without admitting some aberration of judgment, some lesion of memory, of the imagination.

In a certain point of view the objections made in this respect are not devoid of truth. In the greater number of affections of this nature, the intellectual functions undergo derangements sufficiently marked without our being able to rank these disturbances in the class of delirious ideas. Tranquil hyperphrenia does not, we admit, always express a simple excitation of the domain of the sentiments, of the passions; it may be complicated with errors in the conceptions, and may have for allied symptoms a more or less marked incoherence in the ideas; it may present an overruling exaltation of one or other want: it may accompany an hysterical or convulsive state.

Many maniacs of this kind have to undergo degrading convictions before the tribunals, and have expiated in prisons misdeeds committed in the course of a moral alienation. Many homes, many families have been broken up, plunged into misfortune, through this singular disease, considered as a normal condition by the more distant relations, as a mental alienation by those who are nearer the patient. I have seen such unfortunate persons become the object of the most persevering and the most relentless revenge. I have seen husbands affected with this vesania, publicly accuse their wives of the most abandoned conduct. I have witnessed separations and divorces; and I have also seen, after some months, a year or two, passed in a state of mental exaltation, the parties recover their health and bitterly deplore their unhappy lot.

We must consider the different types:

- a. Moral mania, appearing as a permanent phrenopathy.
- b. A state which constitutes the prodromic or initial period of a mania of agitation.
- c. A state which presents itself as a phase of the decline of a violent mania.
- d. A situation which constitutes the intermediate interlucid period of several maniacal attacks, separated from each other by intervals more or less protracted.
- e. A complete state of monomania.

On referring to statistics, I find that out of 100 admissions into this establishment, tranquil mania is met with 30 times as a permanent condition. It is the most frequent of all alienations, and in every case it presents the greatest difficulties with regard to diagnosis.

M. Lélut has said that this state is neither perfect reason nor perfect madness, but a situation in which the patient is not irrational, and does not give himself up to the excesses of a maniac. It is the mixed condition of which M. Moreau has spoken. The characters of this affection have also been described by Esquirol. They are found again in the moral insanity of Prichard. They have been described by the German phrenographers as an affective mania, as a *gemüthskrankheit*.

This initial state easily passes into complete mania.

II. A moral condition which offers a great resemblance to that just described is the *manie raisonnée* of Pinel, the *monomanie affective* of Esquirol.

I am at this moment unable to show you a patient affected with reasoning mania. In this vesania the reasoning faculties rise above the ordinary diapason of the mental faculties. The discourses of the patient are long pleadings. These maniacs display a constant tendency to engage in mental conflicts; and, what is more, these advocates of the madhouse are capable of discomfiting solid logicians. Their controversies are sometimes witty and logical in the extreme.

This morbid form is not often met with in the simple condition: it is often

confounded with mania without delirium, in which the reasoning power remains intact. But in mania without delirium, although there is a certain acuteness in the expressions, a neatness in the ideas, a tendency to criticism, there is also more passion, irascibility, more disposition for contention than in reasoning mania: there are not that controversial spirit, that logic, that special exaltation of the ideas which are observed in this last.

The disease does not consist exclusively in this exaltation of the superior faculties, as Gall has said; it is seen also more or less in the disorders which characterize the acts. Besides the excitation of the intellectual faculties, the patient is a true maniac. It is for this reason that M. Brierre named this affection *madness of action* (*folie d'action*).

The study of this alienation and of mania without delirium claims all the solicitude of the physician. In the appreciation of these affections he will often have to combat against the inexperience of those whom he has to enlighten, and very often his opinion will be looked upon as a leaning which disposes him to discover madness everywhere: but commonly sad realities terminate by opening the eyes of the least intelligent, and by giving the verdict to the man of art.

III. There is a mania which I call *astute, malicious*, which offers many points of resemblance with the preceding varieties, but which, nevertheless, exhibits in its phenomena a ruling character.

It is an affection in which the patient is governed by a spirit of intrigue and malice. He is a rogue, a pilferer, a plotter. He generally evinces a disposition to organize plots and to draw the other patients into his snares. He seems to have the craftiness of the fox, and is sometimes distinguished by a great aptitude for every kind of artistic work. Most frequently he is lucid as regards his intellectual faculties.

I might bring before you several patients afflicted with this mania; but you would gain nothing by seeing or questioning them. Their answers would reveal no disorder, nothing but a certain frivolity of mind. They know so well how to calculate the bearing of their words, that they imitate the man of sound mind. Besides, I do not wish to humiliate them.

These patients stir up the weak against the strong, the subordinates against the chief. They quit the asylums, and come back; they figure before the courts; enter the prisons, and go out. In the prisons it is contended that they ought to be sent to the madhouse; in the asylum it is said that their place should be in the house of correction.

It is under the form of *tranquil monomania* that this alienation is usually manifested; but it may also assume the character of strong exaltation, and even be associated with furious mania.

I am acquainted with several girls who, at the epoch of menstruation, or just before, exhibit this kind of hyperphrenia, which assumes in some of them an acute and violent character.

I have often observed a certain periodicity in the march of this remarkable affection. Five or six months pass, during which the patients cannot be distinguished from persons of healthy mind. But in the spring, in the summer every year, or every second year, the malicious bent manifests itself, lasts a certain time, and gives way again to the normal condition.

IV. *A patient affected with the mania of theft.*

Cleptomania.—I often observe this state as a transitory symptom in the course of mania; I have sometimes also met with it as the radical phenomenon of this affection. It may be a compound condition or an elementary one. It may be a true monomania of theft.

The patient you see there, and who is remarkable for the freshness of his complexion, and the gentleness of his features, by his intelligent look, and his good behaviour, is afflicted with the mania of which I speak. He is employed

as assistant-keeper. The disease announces itself in him by attacks of mania returning every three years, manifested each time by an irresistible inclination for theft. This patient, who is distinguished by many excellent qualities of heart and mind, among others, an ardent thirst for instruction, is a gardener; he steals the plants, money, and clothes of his companions; he baffles the vigilance of the most skilful keepers, and often succeeds in making his escape. He spends the money he has stolen, and robs the people with whom he lodges; he barter and makes exchanges, and cheats those with whom he deals. He gives himself up to every kind of larceny and depredation, and ends by presenting himself at the gates of the asylum for admission.

This fit lasts for several months, and is succeeded by long lucid intervals, during which this man conscientiously makes restitution, in proportion as his earnings will permit, for the money or other effects he may have stolen. It may be concluded that during these intervals he is entirely free from his disease.

Judge, then, of the position of the physician before the courts of justice when his advice is sought in a similar case. What are we to decide concerning this disposition for theft, permanent in some sort, existing from infancy, and following the oscillatory course of maniacal attacks?

I answer, without hesitation: the person in whom these phenomena are observed cannot be regarded as enjoying the command of his reason, although it present long lucid intervals.

This situation is not at all uncommon in pregnant women. A lady in this town was known on every occasion of pregnancy to visit the shops and commit numerous robberies. Her husband usually followed her, taking care to pay for what she had stolen.

All who have written of this species of *vesania*, recognise the important influence of hereditary predisposition in the development of the monomania of theft.

It is most frequently manifested under the form of tranquil mania; sometimes it is associated with a state of agitation and turbulence. It may occur in fits, and in some instances these fits are instantaneous.

V. I have observed cases of *mania* and *monomania* of *avarice*.

VI. The *mania* and *monomania* of *spending* are very frequent. From this alienation to the following phrenopathy there is but a step.

VII. *Mania ebriosa*, *mania crapulosa*, *mania à potu*, dipsomania, oinomania of Rayer (from *ovos*, wine).

The three following conditions lead to this state:—1. The habitual and immoderate use of fermented or alcoholic liquors. 2. The desire of drinking arising in the course of mania as a transitory symptom. 3. The excessive use of drink as the expression of a monomania in persons who are not accustomed to intoxication.

On the one hand, alcoholic liquors convey into the system a stimulating element, which acts unfavourably upon the heart and the depuratory organs; on the other hand, they influence the central system, and especially the nervous system, as agents of intellectual intoxication and perturbation.

The persons who give themselves up to these excesses are sometimes in a state of habitual mania; some are observed to become epileptic; others are directly attacked with dementia, or else this becomes developed as a consequence of mania or epilepsy. In some cases, not very infrequent, the abuse of alcoholic liquors leads to general paralysis.

Characteristic symptoms usually accompany this mental alienation. They indicate, on the one side, a state of cerebral congestion; on the other, a spinal cachexy, and a remarkable debility of the nervous system, revealed by apathy, general prostration, trembling of the limbs, alternating with a state of aggressive reaction, loquacity, complaints and accusations.

Delirium tremens is one of the varieties of this condition. It is a state of surexcitation which accompanies a singular tremor of the limbs. It may be classed among acute affections, but in many circumstances it belongs to the phrenopathies.

Here are two patients affected with mental alienation following the habitual use of alcoholic liquors. Everything reveals habitual sottishness. There is something quite peculiar and unhinged in their features. The skin has the tint of dirty silk, a remarkable puffiness. The dilated pupils give to the look a peculiarly lost and disagreeable expression. The pulse in one of these patients is remarkably small; they are not at all talkative. One of them is epileptic; the other is affected with tremulousness of the limbs. The condition of this latter patient has undergone amelioration since he has been here; I will even say that he has come near to the normal condition. The first has moments of great impatience, of anger, especially on the days which precede his convulsions. But these are less frequent since he has been subjected to the discipline of the house.

Drunkenness may present itself as an essential affection, that is, it may be a true morbid impulse, and constitute a monomania in all the force of the term. I first saw this affection in a music-master, who, every year, or sometimes every two years, abruptly quitted his studies to abandon himself to excessive drinking. He was at these times in a state of continual drunkenness, lasting for three or four months, until it disappeared as it were suddenly. Then this man again became averse to every excess, drank nothing but water, and avoided with extreme care everything that might compromise his health or his dignity. In one of these periods of lucidity, feeling the approach of his disease, he destroyed himself.

It is therefore important to distinguish *mania ebriosa* from the maniacal exaltation which is the sequela of habitual drunkenness. It cannot be confounded with the love of drink, which is a vice of manners. It differs entirely from these conditions; for what characterizes this affection is a morbid inclination, its appearance under the form of monomania and periodical attacks, the frequency of the pulse, the marked debility of the intelligence during the entire periods of the disease.

VIII. *Erotomania* may assume different forms, as *symptomatic erotomania*, *erotic monomania*, *nymphomania*, *hysteromania*, *erotic or uterine furor*, *satyriasis*.

Erotism is often nothing more than a morbid manifestation, showing itself as a symptom, more or less prominent, in the group of phenomena which characterize maniacal exaltation. This is seen in the subject before us. The look of the patient presents nothing morbid: his physiognomy has no expression of irritating passions. There is gaiety in his face, and maliciousness in his eyes. Nothing is out of order in his dress. His bearing is in every way correct. It is the speech that reveals the sentiments by which he is governed. His libidinous and disgusting discourse reveals that in him mania is complicated with sensual excitation. What we have learned concerning the first development of his disease, proves that it began by phenomena quite different from loose conversation. At the present time, when he thinks he is unobserved, he resorts to masturbation.

In many maniacal young women there may be remarked a certain genesial excitation, betrayed by equivocal words and a certain coquetry of bearing. After a certain time this sensual excitation is calmed; but in many cases it persists with the other phenomena of maniacal exaltation.

Most frequently this erotism brings on dementia; and during the course of this, whilst all the intellectual faculties disappear, erotic exaltation continues to show itself. A great number of epileptics are under the influence of a strong genesial excitation. Women affected with mania sometimes exhibit this phenomenon periodically at the epoch of menstruation.

Erotomania is an affection rarely met with in our establishments; it is not observed once in 150 admissions. This may also be a moral insanity. Morbid erotism is manifested in both sexes; it is more frequent in women than in men, in girls and widows than in married women. I have known it in pregnant women. It is more often found in persons who lead a chaste life, than in those who give themselves up to debauchery. It is seen at all ages. Sometimes erotism breaks out at the age of the suppression of the catamenia, and is evidently connected with a special state of the sexual organs. I have seen this morbid condition of the utero-ovarian organs attended by a peculiar turgescence to such an extent as to provoke an abundant secretion of colostrum in the mammary glands, such as is observed in pregnant women.

It is not uncommon to witness this morbid exaltation in women of advanced years and strong constitution. Nothing more curious than to hear the conversation of these erotomaniaes, to watch their airs, their toilet. With fingers covered with rings, dressed out in brilliant stuffs, they display the most sumptuous furniture and decorations, in the hope of attracting the men. Most frequently widows, sometimes grandmothers, these Messalinas of seventy, with their faded charms, cause the desolation and ruin of their families.

An erotomania, which I will call senile, is not rare among men. If we investigate the circumstances which give rise to this affection, we shall discover a congenital condition. A brother, sister, or uncle has been insane.

Erotomania in aged persons generally passes into dementia; but it may last for months, and even years, before undergoing this transformation.

We should form a false idea of erotomania, if we supposed that patients always behave with total disregard to decency. It is not generally so. Sometimes, especially the female patients, present nothing in their conduct to raise a suspicion of this affection. It is, therefore, under the form of a tranquil hyperphreny, and most frequently without any notable alteration in the ideas, that erotic monomania comes under our observation. In some cases, this vesania constitutes a turbulent, but rarely a furious, mania.

Nymphomania, the *aideiomania* of Marc (from *αἰδεῖον*, genital organs), is more rare than erotic monomania. In this affection the symptoms announce a violent excitation of the sexual organs. It is from this affection that hysteromania, the furor uterinus, strictly so called, arises. Satyriasis in the male is a modification. I have not often observed either form. The following case of nymphomania is similar to one cited by Esquirol:—A young couple came to stay at an hotel. They had been married a week. It happened that at the moment of starting the lady observed the catamenia. Yielding to the entreaties of his wife, the husband, who was considerably older than she, abstained from all sexual intercourse, although they shared the same bed. Cohabitation only took place on the eighth day, and was immediately followed in the lady by complete mania, characterized by speech of extreme licentiousness and the most significant gesticulations. It was a furious nymphomania in the complete acceptance of the term.

These varieties of mania are sometimes connected with a peculiar temperament; but most frequently they are not primitive. Sometimes erotic mania succeeds to religious melancholy.

IX. *Joyous mania*, *monomania*, *charomania* of Chambcyron, *mania saltans*. An epidemic choreomania, which has been well described, appeared in the fourteenth century (1373) in Belgium, Holland, and the provinces of the Rhine; it spread to several states in Germany. The patients haunted the churches, abandoned themselves to dancing in the most frantic manner, adorned their heads with flowers, and overran the country in bands. This affection at length assumed a convulsive form, and was called in Italy *Tarentism*; in France these patients were long called the convulsionaries of *Saint-Medard*.

X. *Amemomania*, *amemmonomania* is a variety of joyous mania, in which all

the acts of the patient are impressed with an extreme urbanity and affability. Examples are found in every asylum.

XI. There is a *mania* characterized by *vanity*, the *mania of Narcissus*. This is usually manifested under the form of a tranquil mania, in which we behold the patient infatuated with his beauty, his charms, his wit, his dress, his talents, titles, and birth.

I ought to call to your attention, that in many varieties of mania there is observed greater or less exaltation of self-love. Maniacs in general possess a favourable opinion of everything that concerns them. They are satisfied that what they do could not be better done. They seldom find fault with their person, as is the case in melancholy: the melancholiac has an abject opinion of himself; the maniac, on the contrary, has a propensity to boast of his doings.

This disease is rarely observed under the form of *monomania*. It is often associated with paralyssiform symptoms. It also constitutes a tranquil mania, a moral insanity.

XII. *Ambitious mania, monomania*.—It is not necessary to interrogate the patient now before us, in order to learn the characters of his alienation. His attitude betrays the feelings which agitate him. He is an old captain of a troop of volunteers, who played a part in the revolution of 1830.

The true monomania of pride is a rare vesania: it is not seen here once in 300 admissions.

Ambition constitutes an element in many compound alienations. It may accompany special delirium. It is found associated with paralyssiform dementia. In this alienation the patient fancies himself the possessor of fabulous wealth; everything he sees belongs to him. This condition is quite distinct from the ambitious mania we have been speaking of; which is announced by the absence of every sign of muscular paralysis.

EIGHTH LECTURE.

Religious mania, theomania, religious monomania.—Look at the woman before us. She affects all the attitudes of a fervid devotion. Often she falls upon her knees, gets up, prostrates herself again, runs from right to left, sings religious hymns, and invokes, with a loud voice, the Virgin and the saints. If she had her way, the walls of her room would be covered with images and fancied relics. These manifestations of religious mania contrast in a striking manner with the *melancholy* of this name, as you may perceive in the two persons just brought to us. One of these expresses the sentiments of devotion with humility and fear. The other gives herself up to disordered gesticulation. There is in the first an animation in the features which is not found in this melancholic patient: this latter is extremely reserved in speech, and sober in her gestures; whilst in the maniacal woman there is a certain rapture and ecstacy which fixes the attention.

These two forms, the one maniac, the other melancholic, mark a division established by M. Cécile, who admits a religious mystic form, penitent or oppressive, and a form which is expansive or contemplative.

Religious mania is far less frequent than religious melancholy.

A case of loquacity.—*Logomania, logodiarrhea, logomonomania*. We observe this state in the patient before us. Most frequently the excitation of speech is found in the condition of symptomatic association, combined with other elements of mania or other fundamental forms, as delirium, dementia, and especially incoherence of ideas. It may, however, be manifested without disorder in the ideas, and even without sensible impairment of the conceptions. It occasionally announces a predisposition to phrenopathies; in fact, an extreme loquacity often characterizes the members of some families in which insanity is hereditary.

Quarrelsome mania.—I will show you a prospectus which created a great commotion among many men of rank in this country. It is a document elaborated in this establishment by a maniac, who, after an imperfect cure, published it. This is the printed prospectus:—"The Gleaner, political and literary journal. Motto: Respect for the constitution and laws of the Belgian people. The journal will appear daily: it will have the rare merit of being impartial; it will render justice to true merit; it will blast without merey, mediocrity and bad faith in placemen of whatever rank." Nothing in this prospectus reveals disease; but everything points to a quite different man for those who knew the author before his illness. There was not in this man alienation in the true appreciation of the word; neither was there a normal condition. There existed that intermediate condition in which a man is not himself.

It is not without reason that some practitioners maintain that many persons regarded as cured of mental alienation, never are so, but that some traces of their disease always remain.

Amongst the maniacs we have yet seen, we have rarely witnessed any marked abnormal demonstrations. They are exalted; but the morbid excitation is not transmitted to the impulses. These are tranquil maniacs. But this condition is not invariable: it may rise to the condition of agitated mania. This is especially observed in joyous mania and in erotic mania.

A subject affected with ambulatory mania.—First, I will range in the number of agitated maniacs, *Ambulatory mania*, mania errabunda, Sylvestrus. This state is not characterized by threats or fits of passion, nor by the necessity of destruction, but by an imperious want which drives these maniacs, for example, this man at my side, to be in perpetual change of place, to make excursions, and even long voyages. This form of disease may be met with as a special condition. More frequently it constitutes a symptomatic element in general mania.

Subjects affected with agitated mania.—*Insurrectional mania.* The maniac affected with this vesania waits for you with pallid lips, anger in his eyes; he apostrophizes you in the most insolent manner, with the most imperious air. He addresses the most outrageous expressions to the attendant.

I will now exhibit to you some patients who occupy the highest step in the ascending scale of gravity and violence of symptoms. These patients are affected with that *mania* which, with many other authors, I call *destructive*. It is the *mania* or *monomania furibunda*, *combative*, *homicidal*, *suicidal*, *mania*, *pyromania*. These morbid forms are becoming more and more rare, since the introduction of improvements into lunatic asylums. Many forms of alienation which at the present day, and under the influence of suitable treatment, remain in a tranquil condition, were formerly transformed into furious mania.

In destructive mania there is agitation, animation, irritation, anger, hatred: in other conditions there is an anxiety, a want, an idea of destruction, which is accomplished almost with indifference, with calm: it is an impulse without passion. In destructive mania there is pre-occupation, passion, violent passion.

That the most tumultuous mania may exist without perceptible disorder of the intellectual functions, is certain. We have here numerous examples of this. Pinel has said: "We may justly admire the writings of Locke, and yet admit that the notions he has given concerning mania are very incomplete, when he regards it as inseparable from delirium. I thought like this author when I resumed my researches at Bicêtre upon this disease, and I was not a little surprised to see insane patients, who never offered any lesion of the understanding, and who were governed by a sort of instinct of fury, as if the affective faculties alone were impaired."

Groos has described *mania sine delirio* in a work published in 1830. The

works of Hoffbauer and of Marc contain some interesting facts relating to mania without delirium, in a medico-legal point of view.

There is no exaltation, no impulse, no desire, no passion, no element in the character of man which may not assume the hyperphrenic form.

Destructive mania may constitute a compound alienation, and be associated with a disorder of the ideas, with melancholy, madness, dementia. When mania is accompanied with delirious ideas, it is a *mania with delirium*. It is distinguished, as we shall see, from maniacal delirium in this—that in this vesania, the hallucinations and illusions constitute the radical symptoms. In mania with delirious ideas, these last only occupy the second or third order in the morbid scale.

There is a *melancholic mania*.

There is an *epileptic mania*.

A *mania with madness*.

A *mania with dementia*.

AMERICAN ASYLUMS FOR THE INSANE.*

BY PLINY EARL, ESQ., M.D.

1. THE report by Dr. BELL, of the McLean Asylum, for the year 1851, is, like most of its predecessors, very brief, and is mostly devoted to a description of the method by which the Cochiate water has been introduced into the buildings of the institution. A disbeliever in the value of statistics in insanity, the Doctor makes his practice consistent with his theory by restricting these data to the simple facts—or, as he would say, “facts and opinions” of admission and condition at the time of discharge.

	Men.	Women.	Total.
Patients admitted in course of the year	89	79	168
Whole number in the Asylum	185	179	364
Discharged	90	83	173
Remaining at end of year	95	96	191
Of those discharged, there were cured	40	35	75
Died	15	14	29

“Of the deceased, eight were not under seventy years, and one was over ninety.”

In the report for 1852, it is stated that “the call for room, during the past year, has far exceeded anything in our former experience. It is within bounds to say, that we have been obliged to refuse more female patients than we have received, and probably as many of both sexes as we have admitted. * * * * Our last year’s experience demonstrates that another institution of the magnitude and character of this is as urgently demanded as have been any of our previous substitutes and extensions, which have, one after another, raised our aggregate from the less than seventy, whom I found on taking the charge, to the nearly three times that number we have been obliged to find a place for during the past three or four years.”

* Reports of Institutions for the Insane in the United States.

1. Of the McLean Asylum, for 1851 and 1852.
2. Of the Butler Hospital, for 1851 and 1852.
3. Of the Retreat at Hartford, for 1851 and 1852.
4. Of the Maine State Hospital, for 1851 and 1852.
5. Of the New Hampshire Asylum, for 1852.
6. Of the Vermont Asylum, for 1851.
7. Of the Boston Hospital (Paupers), for 1849, 1850, and 1851.

Hence the Doctor recommends that another establishment, disconnected from the McLean Asylum, and intended for females alone, should be founded. "There are no advantages," he observes, "of which I am aware, in having the insane of both sexes in one institution of this kind, whatever may be the case in pauper establishments, or where labour is expected of the inmates. On the contrary, there are many inconveniences and disadvantages. The customary arrangement of patients of both sexes in the same place, doubtless, had its origin in the expectation that only so many sufferers could be aggregated as would be sufficient for the full employment of a single directing head. It seems not a little singular, that a custom entailing so many objections should have been continued where its original basis had ceased to exist."

	Men.	Women.	Total.
Patients admitted in the course of the year			145
Discharged			135
Remaining at the end of the year			201
Of those discharged, there were cured	37	35	72
Died	11	4	15
Admitted from 1837 to 1852, inclusive			2339
Recovered " " " "			1173
Died " " " "			271
2. The number of patients in the Butler Hos-			
pital, on the 31st of December, 1850, was	50	63	113
Admitted in the course of 1851	33	35	68
Whole number	83	98	181
Discharged	22	32	54
Remaining, December 31, 1851	61	66	127
Of those discharged, there were cured	8	18	26
Died	7	9	16

Causes of death.—Chronic mania 8, "Bell's disease" (typho-mania?) 4, paralytic affections 2, meningitis 1, extensive pulmonary and intestinal disease 1.

The returns of the United States census, for 1850, give the number of the insane in Rhode Island as 233, or 1 in 633 of the population. In 1850, the legislature of the State appointed a commissioner to inquire into the condition of the public poor, and the insane. He visited all the towns, with a single exception, and reported the number of insane as—paupers 143, all others 140, total 283, or one in 521 of the population. Dr. Ray remarks, that "guided by such information as we happen to possess in regard to the immediate question, and generally, by the amount of error such inquiries usually present, I think we may safely say that an addition of 50 per cent. would better express the actual truth. This would make the number of insane 420, or one to every 351 of the inhabitants.

The increasing prevalence of insanity, which is implied by these statistics, induces Dr. Ray to a discussion of one of the most productive causes of this fearful malady—defective or perverted education. "The gross neglect," he observes, "of the moral powers, those which guide the passions and determine the notions, is the crowning defect of the education of our times, ruinous in its consequences to the health, both of body and mind." He recognises "the home" as the place in which children should be taught "to acquire the power of governing passion and resisting the impulses of the lower appetites, of discerning the nicer shades of right and wrong, of sacrificing self to the call of benevolence or duty, and, amid trial and change, steadily keeping in view the great purposes of life. The time has never been," he continues, "when this kind of training, in its highest condition, was very general in our country; but

I submit, as a matter of fact, whether, imperfect as it has been, it has not greatly declined during the last few generations? Unquestionably, at one time, the domestic rule was needlessly rigid and disagreeable, and led to an asceticism of manners equally prejudicial to the mental health and the moral welfare. * * * * * At present, however, we have little to fear from this source, the danger all lying in the opposite direction. The asceticism of our ancestors was infinitely less injurious than the licence which characterizes the domestic training of their descendants. How many of this generation complete their childhood, scarcely feeling the dominion of any will but their own, and obeying no higher law than the caprice of the moment. * * * * * The legitimate result of these defects in the education of our time is, that finally the ordinary virtues of life are degraded to a very subordinate rank. Patient and persevering industry, with its slow and moderate rewards, honest frugality, and a temperance that restrains every excess, frequent and faithful self-examination, clear and well-digested views of duty, become distasteful to the mind which can breathe only an atmosphere of excitement, craving stimulus that rapidly consumes its energies and destroys that elasticity which enables it to arise from every pressure with new vigour and increased powers of endurance. * * * * * The conclusion of the whole matter is, that insanity must necessarily increase in our community until the moral faculties shall be subjected to a higher culture, both in the school and the family."

Report for 1852:—

	Men.	Women.	Total.
Patients, January 1, 1852	61	66	127
Admitted in course of the year	39	62	101
Whole number	100	128	228
Discharged	36	50	86
Remaining December 31, 1852	64	78	142
Of those discharged, there were cured			30
Died			15

Causes of death.—Acute mania 2, chronic mania 5, Bell's disease 3, general paralysis 1, apoplexy 1, phthisis 1, heart affection 1, suicide 1.

"As usual, several deaths occurred within a day or two after admission, from that very fatal form of cerebral disease, which, under the various names of 'meningitis,' 'brain fever,' 'phlebitis,' and 'Bell's disease' (and he might have added 'typho-mania,' the most common of all), has now become very common in our establishments for the insane."

This paragraph is quoted for the purpose of calling the attention of the general practitioner to the peculiar form of mental derangement therein mentioned. It is becoming quite common, particularly in large cities, and it is a form in which the unpractised physician is almost certain to pursue a deleterious course of treatment. I once had two cases sent to me by one physician in the course of a few days, in both of which liberal venesection had been practised. They died, as I believe such patients invariably do, after general bloodletting. It appears to be acknowledged, by all who have had experience in the treatment of this special form of mania, that a fatal result can be avoided only by active stimulation. Dr. Bell's description of the disease may be found in the *Journal of Insanity*, for 1849 or 1850.

During the first five years of the operations of the Butler Hospital, 491 patients were admitted, 127 discharged cured, and 80 died. During a greater part of the year for which the report is before us, the number of patients exceeded what was originally supposed to be the utmost limit of the means of accommodation.

In this report, as in its predecessor, Dr. Ray takes up the subject of the semeiology of insanity, and handles it with that masterly power which is exhibited in all his efforts, wherever he writes seriously and in earnest.

We can only give a general idea of this valuable, interesting, and truthful essay.

"Special and particular cases of insanity," he remarks, "no doubt there are, but the immense disparity between our own and all other times, in the prevalence of this disease, can only be attributed to the peculiarities which distinguish it from all other times. The press and the rostrum, the railway and the spinning-jenny, the steam-engine and the telegraph, republican institutions and social organizations, are agencies more potent in preparing the mind for insanity than any or all those vices and casualties which exert a more immediate and striking effect. This is the price we pay for civilization, and we shall continue to pay it, until that very distant day when men will have learned the difficult lesson of using their blessings without abusing them.

"The present is an age of great mental activity all over Christendom, and especially with us. The amount of it now required for maintaining the ordinary routine of the world, would have passed all conception a century ago. Especially has this been obvious in that constantly progressive enlargement of the field of industry, whereby the attention of men has been turned to an increasing variety of pursuits. * * * * * When we consider the amount of thought that has been concerned in bringing the manufacture of a pin, or a screw, to its present state of perfection, we may have a remote conception of the amount of that kind of mental exercise which is required in creating and conducting the countless processes of human industry. * * * * *

"No single incident of civilization has contributed so much to maintain the mental activity of modern times, as the art printing. * * * * * The multiplicity of books and of readers not only evinces a degree of mental activity which, a century ago, would have been thought to be scarcely within the bounds of possibility, but much of the literature of the day is more or less directly addressed to the lower sentiments of our nature, thereby impairing that supremacy of the higher which is indispensable in a healthy, well-ordered mind. * * * * * It is accessible to every reader in the land, and a large portion of those whom it attracts will be found among the young. If any one is disposed to doubt the accuracy of the fact, or the magnitude of its evils, let him look through any asylum in the country, and there will be seen many a young man, once remarkable, perhaps, for endowment and promise, presenting one of the most loathsome and hopeless forms of disease, and will learn, upon examination, that in many the evil originated chiefly in the reading of books addressed to the imagination and passions. When we consider, too, that cases of this kind seldom recover, and thus add, by accumulation, to the actual amount of insanity in the world, the fact will account for much of its recent increase.

"Much of the mental activity that characterizes our people arises from the abundant opportunities that are offered for the pursuit of wealth, and the consequent variety and novelty of the enterprises undertaken for this purpose. * * * * * The result (of fortunate speculations) all can see and admire, but few know anything of the wear and tear of mind by which it was achieved, of the laborious calculations, the anxious moments, the sleepless nights, the joy of success, the apprehension of failure. Indeed, our ways of doing business, our notions of property, our ideas of happiness, all indicate, as strongly as traits of character can, that a large portion of our fellow-citizens habitually live and move, and have their being, under an extraordinary pressure of excitement which brooks neither failure nor delay. * * * * * The cracking strain of all the faculties most concerned in the management of business, the hopes and fears, the joy and the sorrow, the anticipations of success or defeat, produce a rapid consumption of the mental energies, which strongly predisposes the mind to insanity.

"Over and above that mental activity which is excited by the ordinary pursuits of life, there prevails among us a disposition to penetrate into untrodden fields of inquiry; to construct new systems of philosophy and science; to become absorbed in themes of a special and peculiar character; and especially to speculate in whatever is strange or mysterious, whether in the natural or the spiritual world. * * * * * We question everything; we pry into everything; and, in our opinions, we bring many things to light. * * * * * Animal magnetism, biology, communications with the spiritual world, are now discussed by multitudes with a deeper interest than they ever manifest in those immutable laws of nature which, if understood and observed, would vastly enlarge the sum of human happiness. * * * * * We are naturally led to another manifestation of the mental activity of our times, especially important as being the prolific parent of many others. The intellectual education of the young, on which we are disposed to pride ourselves so highly, is more calculated to stimulate a few of the mental faculties than to produce the harmonious development with the strong and healthy condition of all. * * * * * It may make brilliant and showy men, not incapable, in fact, of producing a sensation in the world, but it will not preserve them from the seductions of fashionable systems in philosophy or morals, nor fit them for meeting the practical exigencies of life in the best possible manner. * * * * * Under a more rational training, we have a right to suppose that a multitude of subjects which now seriously engage the attention of men, with no better results than to weaken, if not destroy, every conservative principle in their minds, would never be entertained, and thus a prolific source of insanity would be avoided.

"Another mental habit of our times, strongly calculated to produce an unhealthy condition of mind, is that of concentrating the thoughts and interests upon a single idea. Whatever subject is deemed worthy of promotion, whether it be morals, politics, literature, or religion, that object is thenceforward regarded as of paramount importance, compared with which all others sink into insignificance. By the individual, it is believed to be the great question of the day, and destined, like Aaron's rod, to swallow up every other. * * * * * At last, he gets to think that there is no hope for the race beyond the pale of his little *ism* or *ology*; and in his zeal for propagating it, he is ready to ride, roughshod, over the most deliberate convictions and most cherished sentiments of his fellow-men. * * * * * This habitual confinement to a very limited sphere of thought, tends to invest the favourite idea with a false colouring, if I may so speak, which distorts its natural proportions and relations, until it finally assumes all the characters of a *delusion*. * * * * *

"Another characteristic of the present generation, deserving of notice in this connexion, is a remarkable proneness to excess and exaggeration in all its intellectual manifestations. Truth is supposed to require a high colouring to make it sufficiently impressive; while the calm, the plain, the moderate, whether in the subject-matter or the form of expression, is apt to be regarded as 'stale, flat, and unprofitable.' * * * * * High-sounding words are mistaken for depth of meaning, extravagance for intensity, and the feverish heat of a jaded fancy for the fervors of a true inspiration. * * * * * To be popular, philosophy must abound in startling theories, and challenge our strongest and dearest convictions; education must aim at apparently great results, rather than the vigorous growth and symmetrical development of the mental faculties; poetry and romance must lay bare the morbid anatomy of the heart, in order to find the real sources of moral life and the true principles of social organization. * * * * * It cannot be questioned that this fondness for the intense, whether real or mock, is unfavourable to mental

health, and has contributed, in some degree, to the recent increase of insanity among us.

"Perhaps nothing is better calculated to foster the kind of mental activity in question, than the practical working of our republican institutions. * * * The political agitation, which is never at rest, around the citizen of a republic, is constantly placing before him great questions of public policy, which may be decided with little knowledge of the subject, but none the less zeal—perhaps with more. * * * Whatever be the occasion, he feels called upon to have an opinion of his own; and if an eye to the main chance shows it to be unsafe to speak out his thoughts, then his ingenuity is exerted to conceal them by means of false issues, double-meaning, and non-committal, and the amount of mental exercise necessary for this end would suffice, half a dozen times over, for the ordinary routine of life. But the mental activity which is excited directly by free institutions is not confined to political matters. It pervades every sphere of action, every exercise of thought. The almost absolute freedom from restraint, and the independence of foreign control, even in opinions merely, lead to a certain hurry and impetuosity of the vital movements, and an impatience that seeks for results by extraordinary effort or superficial methods. * * * We rush into every strife, and take sides in every question that agitates the public mind. * * * We have no idea of any division of labour here, and think ourselves as competent to sit in judgment on questions that have accidentally been brought before the public notice, as they who have made them the study of a lifetime. If, in this way, every man is not his own doctor, or lawyer, or minister, yet he enters, with the zeal of a partisan, into every contest between rival systems of medicine, law, and divinity. * * * How different, in this respect, is the present generation from all the past, in which people were quite satisfied, in regard to certain subjects, with taking their opinions upon trust, in the belief that others might be better qualified, by education and experience, to form them than they were themselves, and thereby avoided one fertile source of that excitement and agitation which prepare the mind for insanity."

This is but a mere skeleton of the article before us; but, in the language of the article itself, it is "enough for those who are disposed to profit by the warning; and too much, probably, for the larger number, who will regard it as merely an ingenious speculation."

Near the close, Dr. Ray asks, "Whoever heard of a book on mental dietetics, or has the slightest suspicion that the health of the mind may be affected by the manner in which its exercise is managed?" This query is now satisfactorily answered, by the admirable little treatise, by Dr. Feuchtersleben, entitled "*Dietetics of the Soul*," originally published at Vienna, but translated and republished in London. A few copies have been imported, and found an immediate sale. Although it contains some extravagances, yet it should be read by every physician, as a certain modicum of the doctrines inculcated therein would be of essential value in general practice.

3. The report for 1851 from the Hartford Retreat gives the following statistics:—

	Men.	Women.	Total.
Patients, April 1, 1851	72	85	157
Admitted in course of the year	68	90	158
Whole number	140	175	315
Discharged	52	82	134
Remaining, April 1, 1852	88	93	181
Of those discharged there were cured	26	42	68
Died	9	13	22

Causes of death.—Consumption 2, chronic inflammation of the intestines 2,

cancer 1, apoplexy 3, general paralysis 2, paralysis 5, dysentery 4, exhaustion 2, general debility 1.

Nine years ago the daily average number of patients was 84; during the year covered by this report it was 168.

The following remarks by Dr. Butler will apply with equal truth to any good asylum, and the ideas therein contained should always be considered in making an estimate of the utility of institutions for the insane: "The benefits conferred by the institution will not be correctly appreciated, if estimated alone by the number of those discharged as recovered. Among those who leave us as more or less improved, or whose mental state is reported as stationary, are many who have received benefits little less in importance to themselves and their friends, than that of restoration to sanity. These take with them, besides an improvement of their general health, greater ability to take proper care of themselves, to control their impulses, and to make a better use of their remaining powers of body and of mind. If patients cannot be restored to reason, it is something to have acquired habits of cleanliness and decency, of peacefulness and industry."

The custom, so common in Continental Europe, of connecting with the institution for the insane, chaplains, whose duty it is to visit the patients daily, has met with but little favour upon this side of the Atlantic, and the Retreat is the only asylum at which it has been adopted. The numerous and grave objections to the plan have there been overcome or rendered nugatory by the rare qualifications of the incumbent. Were all clergymen *fac-similes* of the late Thomas H. Gallaudet; did they understand human nature, psychology, and insanity as well as he; and had they that peculiar natural adaptation to the place which no individual training or effort can attain, the custom might be generally followed, and, undoubtedly, with material benefit. "His equanimity and calmness," says Dr. Butler, "checked the unduly excited; his suavity and quiet dignity calmed the turbulent; his kindness, cheerfulness, and wit, with his ready repartee, cheered and amused the desponding; while his rare conversational powers, and his fund of anecdote, and of general and useful knowledge, made him the welcome companion of all. His aptness of illustration, the happy manner in which he applied practical religious truth to the varying circumstances of the different patients, together with his quick perception of individual peculiarities, gave him ready access to every mind, especially to that class of religious monomaniacs who are difficult of approach, and whose minds appear most obstinately closed against right and natural views. * * * He seemed to bring sunlight with him into our household, and he left its cheering influences in every heart."

The report for 1852 is from the pen of Dr. E. H. Hunt, who acted as physician to the Retreat during the absence, on a voyage to Europe, of Dr. Butler:—

	Men.	Women.	Total.
Patients, April 1, 1852	88	93	181
Admitted in course of the year	66	74	140
Whole number	154	167	321
Discharged	74	77	151
Remaining, April 1, 1853	80	90	170
Of those discharged, there were cured	32	32	64
Died	11	10	21
Whole number, since opening of the Retreat			2318
Discharged, cured			1267
Died			213

It appears from this report, that there are no statute laws in regard to the confinement of patients in the Retreat. Dr. Hunt very justly remarks, that "the security of the public demands that some simple and readily accessible

means of approximately determining the fact of insanity, by means of a careful investigation of each case by some independent and impartial tribunal, should be provided by legislation, and that its requirements, in all cases, be complied with."

Dr. Hunt suggests that, in order to "render the institution worthy, at least, of the entire confidence of even the most timid and exacting," there shall be "a regular monthly visit of two of the members of this board, who shall make a thorough examination of every part of the institution, and learn the reason for every apparent indication of severity or neglect." Now, the Retreat, among its immediate officers, has a chaplain, who, by virtue of his sacred profession, ought not to brook the least maltreatment of the patients; it has its "Board of Managers," and a "Medical Board," both of which, as appears by the report, make "frequent official and unofficial visits;" and it has a "Visiting Committee of Ladies," numbering seven persons. If all these guards are insufficient to prevent the evasion of abuses, it would seem that prevention is impossible. They are enough, at least, to render the labours of the superintendent sufficiently onerous; and, if the proposed committee be appointed, we would advise him, unless he wishes soon to be compelled again to flee to Europe in search of health, to suggest still another committee—a "Resident Committee for the Reception of Committees." That which Dr. Bell very properly terms "*the little-little*," in regard to alleged abuses at the asylums, constitutes a portion of the mental pabulum of certain classes of the people, and can no more be suppressed by additional efforts for the prevention of any real cause in which they might originate, than the delusions of an insane person can be removed by assuring him that they are erroneous and absurd.

4. The report of the Maine Insane Hospital embraces a period of twenty months, from the 31st of March, 1851, to the 30th of November, 1852.

	Men.	Women.	Total.
Patients at the commencement of the period	34	24	58
Admitted since	64	35	99
Whole number	98	59	157
Discharged	47	25	72
Remaining at the close of the period	51	34	85
Of those discharged, there were cured	22	34	34
Died	8	1	9

"1 died with pneumonia, 3 with general paralysis, 1 with scrofula, 1 with malignant sore throat, 1 with epilepsy, 1 with inflammation of the liver, and 1 with consumption."

Since the institution was opened it has received 115 suicidal patients, 61 males and 54 females. Only 2 of these, and those both males, have committed suicide while in the hospital, though several have done so after being removed therefrom. Of homicidal patients there have been 69, 53 males and 16 females. "No accident from any of these has ever occurred." "The suicidal form of insanity is as likely to recover as any other form, but the homicidal much more rarely recovers." "There have been 20 who had both suicidal and homicidal propensities, 11 males and 9 females."

Of patients inheriting a predisposition to insanity, "337 have enjoyed the benefits of the hospital and been discharged. 148 of them went home cured; a proportion nearly equal to that which obtains among those who do not inherit the disease."

Dr. Harlow thus writes of the practical operation of that "Maine Law" which provides that all persons charged with crime, and alleged to be insane, shall be removed to the Insane Hospital for the purpose of testing the validity

of the allegation: "We have had 5 such cases within the last twenty months, sent here by order of the court. They were all males. Three of them were charged with the crime of *arson*, 1 with *larceny*, and 1 with *assault with intent to kill*. Three proved to be insane beyond a doubt. The other two were brothers, one aged seventeen, the other ten, and both charged with the crime of *arson*."

"In the case of the elder boy, so much doubt existed in relation to the presence of insanity, that he was removed from the hospital soon after we reported him to the court. The younger boy is of diminutive size, physically slender, strongly marked with the nervous temperament, quite active and irritable, and has rather a wild, peculiar expression of the eye, and the impediment of stammering. He is unlike any other boy we have ever seen, an enigma of no easy solution. He possesses a good memory, an uncommon observation, great inquisitiveness, acute perception, strong affection, emotion, and feeling, little or no judgment, and a will which brooks restraint with great difficulty. He is naturally far from being malicious, but possesses kind and tender feelings towards all, except when under the influence of passion. He is forward, fearless, and bold. He is a creature of impulse; and here, we consider, lies the secret of the whole matter. Impulse, if we may so speak, usurped all power, and impelled him, in the absence of judgment and all conscience, without motive or thought, to commit the crime with which he is charged. We could not consider him in any other light than as an irresponsible boy, as not accountable for the acts which he committed, on the ground of *an undeveloped judgment and a want of conscience*."

5. Dr. McFARLAND having resigned the superintendence of the New Hampshire Asylum, his place has been filled by the appointment of Dr. JOHN E. TYLER, the author of the report now before us.

	Men.	Women.	Total.
Patients on the 31st of May, 1852	63	55	118
Admitted in course of the year	68	64	132
Whole number	131	119	250
Discharged	61	46	107
Remaining, May 31, 1853	70	73	143
Of those discharged, there were cured	41	22	63
Died	5	3	8

Causes of death.—Chronic mania 3, consumption 2, exhaustion 2, suicide 1.

From the opening of the asylum, in 1848, 1058 patients have been received, 434 discharged recovered, and 92 have died.

The report is brief, and does not touch upon any important subject which has not heretofore been fully discussed in these "notices."

6. The report of Dr. ROCKWELL, of the Vermont Asylum, is limited to three pages.

	Men.	Women.	Total.
Patients on the 1st of August, 1851	173	155	328
Admitted in course of the year	63	74	137
Whole number	236	229	465
Discharged	67	63	130
Remaining, August 1, 1851	169	166	335
Of those discharged, there were cured			73
Died			35
Admitted since the opening of the asylum			1746
Discharged cured			818

A severe form of dysentery prevailed, chiefly in the months of August and September (1850). 93 patients were attacked by this disease, of whom

16 died. Nearly all our attendants and assistants were attacked by the same disease, all of whom recovered.

In treating of the caution necessary to be observed in regard to the removal of persons to the asylum, Dr. Rockwell makes the subjoined remarks, which coincide with the opinions which we long since formed and expressed in regard to the class of cases in question

"There is one class of cases, especially, which are frequently sent too early to a lunatic asylum, I mean that of puerperal cases. We have repeatedly had women brought to the asylum in less than two weeks from their accouchement. Some of them have recovered very soon, but would, probably, have recovered as well had they remained at home. Others have died, apparently from exhaustion, who might have recovered had it not been for the exposure and fatigue of the journey."

7. The Boston Lunatic Hospital was opened in 1839, and the report of 1849, by Dr. STEDMAN, contains the principal data in regard to the movement of its population, during the first decennium of its existence.

	Men.	Women.	Total.
Whole number of patients	313	298	611
Discharged	232	175	407
Cured			180
Died			129
Remaining			204

Single 329, married 211, widowed 61, unknown 10.

Causes of death.—Consumption 26, marasmus 13, general paralysis 11, epilepsy 10, dysentery 10, Asiatic cholera 10, general debility 9, diseases of heart 8, hemiplegia 5, exhaustion 4, chronic diarrhœa 4, suicide 3, chronic inflammation of brain 2, erysipelas 2, variola, inflammation of stomach and intestines, inflammation of intestines, fungus hæmatodes, typhoid fever, scrofula, cholera morbus, pleuro-pneumonia, tubercular peritonitis, cancer, purpura, and wound of an artery, 1 each.

"During the last year, and that preceding, dysentery prevailed epidemically, and very severely. Erysipelas has been of frequent occurrence among us. The Asiatic cholera was not so terrific in its ravages here as we had anticipated. On its first irruption, provision was made for such patients as might be attacked by it, by converting our bowling-alley building into a cholera hospital. Great care was also taken in properly ventilating the halls and rooms of the main hospital, in regulating the diet, and in watching and arresting the very first movements towards this affection. Numerous inmates were seized with diarrhœa during this epidemic, and had it not been for the timely and successful attempts made to check this apparently premonitory symptom, cholera would not have left this household so free from its ravages as it did. The number of those prostrated with true cholera was 16. Of these, 10 died; all of whom had been insane for too long a period to allow of any expectation of recovery from their mental disease."

In the course of the year one of the patients stabbed another in the leg, with a knife which he procured in the dining-room. The hemorrhage was arrested by tying the femoral artery, and, twelve days afterwards, secondary hemorrhage by tying the external iliac. Death, however, ensued, twenty-five days subsequent to the primary wound. The investigation by the grand-jury established the fact that the attendant upon the patient who committed the outrage had neglected to follow the printed rules of the house, obedience to which would have prevented the accident.

In a case of prolonged abstinence from food, Dr. Stedman administered chloroform, and, while the patient was under its influence, "nourishing liquids

were readily swallowed." "I have since," he remarks, "resorted to the same treatment in other cases, with a like beneficial result. My belief now is, that in anæsthetic agents we have a perfect preventive of self-destruction from starvation, in those cases, at least, where there is no organic lesion of the stomach."

From the report for 1850.

	Men.	Women.	Total.
Number of patients, November 30, 1849	80	123	203
Admitted in course of the year	27	46	73
Whole number	107	169	276
Discharged	26	46	72
Remaining, November 30, 1850	81	123	204
Of those discharged, there were cured	12	25	37
Died	8	17	25

Died of consumption 4, general debility 3, paralysis 2, exhaustion 2, dropsy 1, erysipelas 1, marasmus 1, dysentery 11.

"Dysentery has been the most prevalent and fatal disease with which we have had to contend. It commenced about the 1st of August, and continued till about the 1st of November. During this period 47 cases occurred of a severe and very intractable character. Of this number, 10 died. It proved most fatal among the aged and the melancholic, and took off but one case in which there was any certainty of recovery from mental disease. It was remarked that only the most emaciated, or such as were suffering from other and long standing disease, succumbed to dysentery; the fat and more robust who were attacked survived. One patient, an Indian, in good bodily health, afflicted with chronic mania, and who had been insane three years, was seized with the severest form of dysentery which has ever come under my observation. While in the height of the malady, his mental operations began to undergo a change, after which his mental and bodily convalescence went on together, and resulted in the perfect restoration of the entire man. Another, a man who had been insane over twenty years, and quite a difficult one to manage, owing to his strong mischievous propensities, was attacked with the same affection, and remained dangerously ill for some weeks. He recovered from dysentery, and now no patient in the house is more quiet and controllable. Indeed, to many he would appear mentally sound."

In June, 1851, Dr. Stedman resigned his office, and Dr. Clement A. Walker was elected as his successor. The report for that year is from the pen of the latter.

	Men.	Women.	Total.
Patients, November 20, 1850	81	123	204
Admitted in the course of the year	46	46	92
Whole number	127	169	296
Discharged	27	28	55
Remaining, November 30, 1851	100	141	241
Of those discharged, there were cured	13	14	27
Died	10	12	22

Causes of death. — Consumption 3, exhaustion 3, general debility 2, dysentery 2, epilepsy 2, marasmus 2, apoplexy, typhoid fever, typhus fever, pneumonia, inflammation of bladder, general paralysis, and chronic diarrhœa, 1 each.

"But one epidemic has appeared among us the past year, and although dysentery was prevalent, numbering nearly fifty cases, yet it was of mild type, and was fatal in but one or two instances."

The following case of "an intelligent Irish lad" is worthy of a place upon permanent record:—

"The little fellow, but thirteen years of age, arrived at Boston, on board an emigrant vessel, in July last (1851), having no friends here, with the exception of a brother, who had preceded him but a few months. He landed on Thursday, and on Saturday became a raving maniac. Confused by the strangeness, and, to his eyes, the magnificence of the city, which, for weeks, had been the culminating point of his anticipations, he wandered about, gazing upon the novelties by day, and dreaming of them by night, until he believed himself the inhabitant of a fairy land, and could not recognise the brother whose bed he shared; 'for,' said he, 'he was dressed so nice, and we usedn't to be so at home.' Reason soon fled, and for weeks he by turns babbled like a child and raved like a madman. At length convalescence was established, and has since rapidly progressed. A few weeks more and he will doubtless go out from us whole."

Of the 92 patients admitted in the course of the year, 61 were foreigners, 50 of them from Ireland.

Persons acquainted with the subject will perceive, by the statistics herein quoted, how, as time has progressed, the great predominance in the number of males over that of females in our public institutions for the insane has disappeared. Indeed, *from these data*, it would appear that there are more insane females than males. Excluding the Maine Hospital, where, since the conflagration, the apartments for men greatly exceed those for women, the number of patients remaining in the above-mentioned asylums, at the time of last report (except the McLean, of which the latest report does not distinguish the numbers of the sexes) was, of males 582, females 645, and the number of admissions, in course of the preceding year, males 367, females 399.—(*American Journal of Medical Science, for January, 1854.*)

ON A SUBSTANCE PRESENTING THE CHEMICAL REACTION OF CELLULOSE, FOUND IN THE BRAIN AND SPINAL CORD OF MAN.*

It is well known that Carl Schmidt† was the first to discover in the Ascidian the presence of a principle previously known to exist only in plants, viz. *cellulose*, and to show that it was a constituent of the animal tissue. The researches of Kölliker and Löwig,‡ of Schacht,§ and of Huxley|| have established this important fact. The occurrence of this substance, however, was limited to a comparatively very low class of the Invertebrata; and the further discovery made by Gottlieb, in *Euglena viridis*, viz., that this *infusorium* contains *paramylon*, a body isomeric with starch, also had reference only to a creature in the lowest class of the animal kingdom.¶ Nothing of the kind, on the other hand, has been known as existing in the vertebrata, and it is only since the discovery by C. Bernard—that the liver produces sugar—that we have had reason to

* By Rudolph Virchow. (Sept. 4, 1853.) Virchow's Archiv. B. VI. H. 1. p. 135.

† Zur Vergleichenden Anat. d. Wirbellos. Thiere, 1845, p. 61.

‡ Ann. d. Sci. Nat., 1846, p. 193.

§ Mull. Archiv., 1851, p. 176.

|| Quart. Journ. Micr. Sci., vol. i. p. 22. 1853.

¶ The pertinacity with which German naturalists cling to the animal nature of *Euglena*, we must confess, is very surprising to us, who are equally satisfied that it is as much a subject of the vegetable kingdom as the motile zoospores of any Alga, such as *Volvox*, *Hydrodictyon*, *Protococcus*, &c.

suppose that substances belonging to the *amylum* series may also have a representative.

From histological considerations, it had struck me that the umbilical cord of man presented a great resemblance in structure to the cellulose tissue of the Ascidians (Wurzb. Verh. 1851. Bd. II., p. 161, *note*), and I was only the more confirmed in this notion by Schacht's observations, so that I have since directed my researches with care to the subject. But in many instances this was in vain, as, for instance, in the *ova* of Amphibia and fishes, the remarkable vitelline plates of which I described, (Zeitsch. f. wiss. Zoologic. 1852. Bd. IV., p. 240.)

I was more fortunate when, a short time since, I directed my attention to the so-termed *corpora amyloacea* of the brain, upon the precise nature of which, contrasted with the other kinds of amyloid bodies in man, I had not previously arrived at any accurate notion. (Wurzb. Verh. 1851. Bd. II., p. 51.) It was now apparent that these bodies assumed a pale-blue tinge upon the application of iodine, and upon the subsequent addition of sulphuric acid, presented the beautiful violet colour which is known as belonging to *cellulose*; and which in the present instance appears the more intense from the contrast with the surrounding yellow or brown nitrogenous substance.

I have repeated this experiment so often, and with so many precautions, that I regard the result as quite certain. Not only have I instituted comparative researches in different human bodies, and in the most various localities, but I have also noticed the action of the reagents under all possible conditions. The experiment is best made in the mode adopted by Mulder and Harting, with vegetable cellulose (*vide* Moleschott, "Physiologie des Stoffwechsels," p. 103), viz., by causing the action of diluted sulphuric acid to follow that of a watery solution of iodine. The iodine solution should not be too strong, for the observation may then be impeded by its precipitation; and, on the other hand, care must be taken that the iodine exerts due action upon the substance. Owing to the volatility of the iodine, and its great affinity for animal substances, its action is usually very unequal, so that the border of the object and not the centre may be penetrated by it; or, perhaps, of spots in close contiguity, one will contain iodine and the other not. It is, consequently, always advisable to repeat the application of the iodine several times, but to avoid the addition of too much. Upon the subsequent addition of sulphuric acid, if the action have been too powerful, the result is a perfectly opaque, red-brown colour. The most certain results are obtained if the sulphuric acid be allowed to act very slowly. In fact, I have procured the most beautiful objects in allowing a preparation covered with the glass to remain undisturbed with a drop of sulphuric acid in contact with the edge of the covering-glass for from twelve to twenty-four hours. Under these circumstances, the most beautiful light violet-blue was occasionally presented. Lastly, I would just intimate that accidental mixtures of starch or cellulose may readily happen, seeing that very light fibres or minute particles from the cloths with which the object and covering-glasses have been cleaned, may very easily be left upon them, which would afterwards exhibit the same reaction as the above.

Every precaution having been taken, the following results will be obtained:—

1. The *corpora amyloacea* (Purkinje) are chemically different from the concentric-spherical corpuscles of which the brain-sand is composed, and with which they have hitherto usually been confounded. The organic matrix of the brain-sand granules is obviously nitrogenous: it is coloured of a deep yellow by iodine and sulphuric acid. This is true not only of the sabulous matter in the pineal gland and choroid plexuses, but also of that of the Pacchionian granulations and of the *dura mater*, as well as of the dentate plates in the spinal arachnoid. In all these parts I have, in general, nowhere obtained the blue reaction, except in a few spots in the pineal gland. It would, therefore, for the future,

be convenient to restrict the name of "corpora amylacea" to the bodies containing cellulose.

2. These bodies exist, so far as I have at present found, only in the substance of the *ependyma ventriculorum* and its prolongations. In this I include especially the lining of the cerebral ventricles and the transparent substance in the spinal cord described by Kölliker, as the *substantia grisea centralis* (Mikrosk. Anat. Bd. II. 1, p. 413). With respect to the cerebral ventricles, I have already repeatedly stated, that I find them to be lined throughout with a membrane belonging to the connective tissue class, upon which rests an epithelium. This membrane contains very fine cellular elements, and a matrix sometimes of more dense, sometimes of softer consistence, and is *continued on the internal aspect without any special boundary between the nervous elements*. In the deeper layers of this membrane, and in immediate contiguity with the nerve fibres, the cellulose corpuscles are found most abundantly, and they are also especially numerous where the *ependyma* is very thick. They are consequently very abundant on the *fornix*, *septum lucidum*, and in the *stria cornua* in the fourth ventricle. In the spinal cord, the substance corresponding to the *ependyma* lies in the middle, in the grey substance, in the situation where the spinal canal exists in the fœtus. It there forms evidently a rudiment of the obliterated canal, such as is presented in the obliteration of the posterior cornu of the lateral ventricle, which is so frequently met with. In a transverse section of the cord, it is easily recognised as a gelatinous, somewhat resistant substance, which may be readily isolated. Its cells are much larger and more perfect than those of the cerebral *ependyma*. This *ependyma spinale* forms a continuous gelatinous filament, which extends to the *filum terminale*, and might, therefore, perhaps, be most suitably described as the *central ependymal filament*. In it the cellulose granules are also found, though, as it would seem, more abundantly in the upper than in the lower portion. In other situations I have sought for these bodies in vain, and in particular I have been unable to find them in the external cortical layer of the cerebrum, or anywhere in the interior of the cerebral substance.

3. Since, from the experiment of Cl. Bernard, who produced saccharine urine by wounding the floor of the fourth ventricle in the rabbit, there appeared to be reason to conclude that the existence of cellulose was connected with that phenomenon. I sought for it also in rabbits, but in vain: I found in that situation both in the fourth, and the third, and in the lateral ventricles, a very beautiful tessellated *epithelium* with very long vibratile cilia, but no cellulose.

4. The cellulose granules, therefore, appear to be everywhere connected with the existence of the *ependyma substance* of a certain thickness, and might perhaps be regarded as a constituent of it. They occur of excessively minute size, so that the *nuclei* of the *ependyma* scarcely correspond with them. Can they be formed out of the latter? The larger they are, the more distinctly laminated do they appear. But there is never any indication in them of a nitrogenous admixture, recognisable by a yellow colour. The centre only is usually of a darker blue, and consequently perhaps more dense than the cortical laminae.

5. As to an introduction of these bodies from without, such a supposition is the less probable because a similar substance is nowhere else known. We are acquainted with a series of varieties of vegetable cellulose, but the substance now in question appears to be distinguished above all by its slight power of resistance to reagents, seeing that concentrated acids and alkalis attack it more powerfully than is usually the case with the cellulose of plants.

6. In the child I have as yet sought for it in vain, so that, like the "brain-sand," it appears to arise in a later state of development, and probably may have a certain pathological import.

Since writing the above, Professor Virchow has repeated and confirmed his

observations, and ascertained in addition that similar bodies also occur in the higher nerves of sense. He found them most abundantly in the soft grey interstitial substance of the olfactory nerve, less frequently in the acoustic, although the observations of Meissner (Zeitsch. f. rat. Med., N. F., Bd. III., pp. 358, 363), would indicate a proportionately great disposition to their formation in that situation. Rokitsky appears to have seen them in the optic nerve, and from an oral communication the author has learned that Kölliker has found them in the retina.

Having already stated that the *ependyma* is continued without special limitation among the nervous elements, the author goes on to observe that it is now apparent that there is a continuous extension of the same substance in the interior of the higher nerves of sense. From a series of pathological observations, he concludes that a soft matrix referrible mainly to connective-tissue substance, everywhere pervades and connects the nervous elements in the centres, and that the *ependyma* is only a free superficial expansion of it over the nervous elements. The opinion, that the epithelium of the cerebral ventricles rests immediately upon the nervous elements, appears to have arisen from a confusion of this interstitial substance with the true nerve-substance.

The isolation of the *corpora amylacea* in larger quantity, in order that they should be subjected to chemical analysis, the author has not yet succeeded in effecting. Nevertheless it seems impossible to entertain any doubt as to their cellulose nature. No other substance is known which affords the same reaction; and although the author has examined the most various animal tissues, and has accurately investigated, particularly, the concentric corpuscles occurring elsewhere, as in the *thymus* in *tumours*, &c., nothing of the same kind has presented itself.—(Sept. 25, 1853.)

An abstract of the above observations also appears in the 'Comptes Rendus,' for the 26th Sept., 1853, p. 492, but containing nothing additional.

Being desirous of verifying the above observations, I have examined the brains of one or two individuals; and, as my results differ in some respects from those of Professor Virchow, I will here briefly state them, leaving a more detailed account of the matter to a future opportunity, my observations at present having been too scanty to justify the expression of any settled opinion. The first case I examined was that of a young man who died of the consecutive fever of cholera, after an illness of five or six days, during the whole of which period, the renal secretion was completely suppressed. What I noticed in this case was:—

1. The enormous abundance of the *corpora amylacea* in certain situations, as the *ependyma ventriculorum*, particularly on the *septum lucidum*, and more especially also on the choroid plexuses, upon gently scraping the surface of which a fluid was obtained containing these bodies in the most surprising quantity.

2. That they existed in immense abundance in the olfactory bulbs and in the superficial parts of the brain, both cortical and medullary, contiguous to the tract of the olfactory nerves. But scarcely any part of the *cerebrum* and *cerebellum* could be examined, at all events towards the surface, without meeting with some or more; and they occurred abundantly in the very middle of the *cerebellum*. Their distribution, however, was very irregular, inasmuch as they abounded in some spots and were nearly, if not altogether wanting, in others. I could find none in the *corpora striata*, where they seemed to be replaced by "brain-sand," of which more will be said afterwards.

3. The cerebral substance in immediate contiguity with the *corpora amylacea* appeared quite natural.

4. The corpuscles were starch and not cellulose, and possessed all the structural, chemical, and optical properties of starch, as it occurs in plants, as the following few details will show:—

They were of all sizes, from less than a blood-disk up to 1-500th inch or more—generally more or less ovate, but many irregular in outline, and apparently flattened, as all the larger kinds of starch I believe are. Many of the larger ones showed the appearance which, in starch, has been erroneously described as indicative of a laminated structure; whilst in others this appearance under any mode of illumination certainly did not exist. The point that would correspond with the so-called *nucleus* of a starch-grain was, unlike that of most kinds of starch, central, and consequently the laminated marking was concentric to the grain, which is rarely the case in the starch of plants. This apparent lamination depends, as I believe, upon the same circumstances as in other starch (*vide* Trans. Mier. Soc., Quart. Journ., vol. i., p. 58), that is to say, upon the corrugation of a thin *sacculus*. That this was the case I satisfied myself by the use of sulphuric acid and of Schultz' solution (chloride of zinc and iodine), in the mode described in my paper above quoted. By these means, but more readily and conveniently by far by the latter, the *corpora amylacea* could be seen to unfold into empty, flaccid, thin-walled, blue sacculi, six to eight times larger than the original grain. Their structure thus appearing to be identical with that of starch, the identity of their chemical composition was rendered evident with equal facility. Simple watery solution of iodine coloured them deep blue, which ultimately became perfectly black and opaque. They were soluble after swelling and expanding in strong sulphuric acid, and by heat; and, moreover, they acted upon polarized light in the same way as starch does. Some of the smaller grains exhibited a distinct and sharply-defined black cross, of which the lines crossed at angles of 45° in the middle of the grain, but in the majority, there was only a single dark line in the long diameter of the grain, and which seemed always to correspond with an irregular fissure of hilus, as it might be termed, in the same direction, which was presented in a great many of the grains, and seemed to be the indication of a partial inrolling of them, as in the starch of the horse-chestnut. This longitudinal fissure was not unfrequently crossed by a shorter one at *right* angles. When the covering-glass was closely pressed, the grains were easily crushed, breaking up in radiating cracks around the margin; and sometimes, when thus compressed, a concentric annulation would become evident, which was before inapparent.

In the *corpora striata*, as I have mentioned above, I could find few or no starch-grains, but here an appearance presented itself which seems to be connected with their formation. Many particles of sabulous matter or crystalline corpuscles of the ordinary "brain-sand," were met with, all of which, instead of lying like the starch-grains, in the midst of unaltered nerve-substance, were lodged in irregular masses of what appeared a fibrinous or immature connective tissue-substance; and, in this instance, upon the addition of iodine, each mass of crystals was found to be immediately surrounded by an irregular thickness of a transparent matter, which was turned not *blue*, but a light *purplish pink* by that reagent—a substance, in fact, closely resembling in that respect the very early condition of the cellulose wall; for instance, in *Hydrodictyon*,—an immature form, as it may be termed, of cellulose.

In a second case, that of an old man—dead of chronic dysentery, and who died comatose—I found the ventricles distended with about three ounces of clear fluid. The surface of the *ependyma* throughout all the continuous cavities was studded like shagreen with minute transparent granulations, which on microscopic examination appeared finely granular and homogeneous, or sometimes faintly fibrillated. In this case there were, I think, no *corpora amylacea* in the *ependyma* (at least I found none), nor in the central substance of the brain: a few were met with in the peripheral portions, especially on the summits of the hemispheres, and still more in the much-developed Pacchionian granulations, and there commingled with *other* concentrically-laminated bodies,

which formed botryoidal masses imbedded in a stroma of immature connective tissue: these bodies, which might, to distinguish them, be termed the "chalcædonic corpuscles," were rendered yellow by iodine. In this case also, I did not notice the *quasi* cellulose-deposit around the particles of "brain-sand," but in several instances I saw minute amylaceous particles (coloured blue by iodine), contained in cells which they only partially occupied.—GEO. BUSK. (From No. 7 of the *Quarterly Microscopical Journal*.)

NOTE.—In the "Comptes Rendus," No. 23, (Dec. 5, 1853,) are some further observations on the "Animal Substance analogous to Vegetable Cellulose," by R. Virchow, in which he announces the discovery of corpuscles presenting the same reaction as the *corpora amylacea* of the brain, in the Malpighian corpuscles of diseased human spleens—in the condition termed "waxy spleen" (Wachsmilz).

STATE OF LUNACY IN PARIS.

A REPORT on the situation of lunatics in the asylums at Paris was presented to the Council General of the Seine in its last session. On the 31st December, 1854, the number of lunatics under treatment was 3182. In all France there were 16,719, which made 1 in every 2123 of the total population; but in Paris and the department of the Seine, the proportion was 1 in every 474. This was owing to the fact that, at Paris, idiots are readily admitted into asylums, in order to prevent them from becoming a spectacle, or being ill treated in the streets; whereas, in the country, great numbers, not being dangerous, are allowed to be at large, and are generally treated kindly by everybody. In fifty-one years the number of lunatics in Paris and the department of the Seine has increased from 946 to 3182. The number of admissions in the course of 1852 was 1509. Amongst them were 454 traders, 149 members of liberal professions, 26 agriculturists, &c. 976 of them belonged to Paris, 182 to the department of the Seine, the rest to different parts of France, and 61 to foreign countries. Amongst the foreigners were 1 Englishman, 21 Belgians, 16 Sardinians, 6 Prussians, and 5 Germans. The number of persons discharged in the course of the year was 849; of cured 556; and of deaths 462. The proportion of deaths was nearly half less than in the ordinary hospitals; and the principal cause of them was paralysis,—that disease having caused 194 of the total. All the lunatics of Paris and the department are not treated in the asylums of Paris; some are maintained in those of the provinces—Blois, Maréville (Meurthe), Arménieres (Nord), &c.—but at the expense of Paris. The expense of each lunatic per day in Paris was 1fr. 50c. for men, and 1fr. 20c. for women; and in the provinces it averaged from 1fr. to 1fr. 25c. The total expense of the year was 1,438,432fr. 78c.; of which 434,065fr. were disbursed in the asylum of Bicêtre, 592,542fr. in that of La Salpêtrière, and the rest in the provinces. Part of the expense, however, has to be repaid by the families of the patients, the Prefecture of Police, and the rural communes; and another part by foreign governments,—amongst which governments that of England owes 711fr. 30c., that of Belgium 644fr. 50c., and that of Piedmont 2867fr. 80c. By a Law of 1838, two sorts of admissions into lunatic asylums are allowed: one, called "voluntary," is that of non-dangerous lunatics on the demand of their families; the second, called "official," is ordered by the Prefecture of Police, with respect to persons whose maladies are dangerous to themselves or others. Before 1838 the number of official admissions was less than that of voluntary admissions: from 1833 to 1838, for example, the former was 2821, and the latter 4242. But from 1838 to 1851, out of 16,716 admissions, 4163 were voluntary and 12,553 official. Of the 1509 admissions of 1852, 398 were voluntary and 1111 official. Up to the commencement of the nineteenth century, the laws did not occupy themselves with the condition of lunatics.

Confounded with thieves and vagabonds, lunatics were confined in the prisons and hospitals. From a report presented in 1791 to the National Assembly by M. de La Rochefoucauld-Liancourt, it appears that at that time the number of lunatics was 1331. At that period two wards of the Hôtel Dieu were reserved to the curable; but they were often placed three or four together, men and women, in the same bed; the more violent were even bound with chains, and the other patients heard all day long their cries, or witnessed painful scenes.

The incurables were placed at Bicêtre, La Salpêtrière, and the Petites-Maisons (at present Hospice des Ménages.) The cells in which they were confined were only six feet square; light and air were admitted by the door; truckle beds covered with straw, and fastened to the walls, were all they had to sleep on; and water fell from the walls. In 1792, Dr. Pinel, physician of Bicêtre, and afterwards of La Salpêtrière, put an end to this frightful state of things. The creation of the Conseil General des Hospices in 1800 completed his undertaking. Since that time the regard due to misfortune, the care which a suffering being requires, and the protection of individual liberty, have been the sole principles by which legislation relative to lunatics has been guided. The law of the 30th June, 1838, which constitutes the code on the subject, is thus described in the exposé des motifs presented to the Chamber of Peers:—"It is a law of police and of protection with respect to all the citizens, a law of kindness and of guardianship with respect to the insane, and a law of public charity with respect to the unfortunates, whose position and that of their families leaves them without resources." Since that time, however, a good many improvements have been introduced into the treatment of the insane. Spacious and healthy lodgings with boarded floors have been substituted for the old cells; an iron bedstead with excellent bedding, a chair, and a table form the furniture of each room; the number of physicians has been increased, and that of the employés charged to watch over and attend the patients has almost been doubled. The old practice of making the patients dine in their own room has been suppressed, and they take their meals in common in vast refectories, comfortably furnished. The horrible wooden bowls, in which food was formerly served up, have disappeared, and the patients are served in earthenware vessels; each has an iron spoon and fork, a knife and a cup. The meals are preceded and followed by a prayer; at Bicêtre the prayers are chanted in common by the patients. These prudent innovations, by obliging the patients to control themselves in each others' presence, have not a little contributed to the establishment of order, and the respect of rules. Formerly, the clothing allowed was made to last three years. This, however, was carrying economy too far. The state in which the clothes were after such long service, especially those worn by the infirm or the aged, who are generally not remarkable for cleanliness, may be imagined. In 1841 only 13fr. a-year were allowed at La Salpêtrière, and 11fr. at Bicêtre, for the clothing of each patient; but at present nearly double the sum is granted, and the clothes are replaced when unfit for use, without regard to the length of time they have been worn. Work is the most salutary and most efficacious means of action that can be employed in lunatic asylums: it calms when it does not cure, and that constitutes a sensible amelioration. In the two asylums at Bicêtre and La Salpêtrière, 1343 patients work with acuteness which astonishes all visitors; in fact, the silence they observe could certainly not be obtained in the workshops of men in sound health of body and mind. Moreover, work is for these unfortunates a source of profit, and thereby they are able to procure some little comforts not included in the ordinary régime of the establishments. Finally, to amuse the patients and break the monotony of their stay at the hospital, games, singing, gymnastics, drives in the country, &c., are allowed. These experiments have already produced the best results, and all physicians advise that they shall be continued.

PATHOLOGY OF INSANITY.

(To the Editor of the *Psychological Journal*.)

SIR,—Will you allow me the privilege to offer a few remarks in reply to the strictures of Dr. Hitchman, on certain passages, contained in my "*Nature and Proximate Cause of Insanity*?"

The essay of mine is, it is perceived, divided into two parts; the first designed to show the "*contradictory*" evidence of various medical writers on the subject of which it treats; and the second to prove the correctness of my own peculiar views.

To Dr. Lockhart Robinson I am indebted, solely, for the summary of Dr. Hitchman's opinions, as contained in this gentleman's "*Report on Psychological Medicine*," published in Vol. xv. of "*Ranking's Abstract of Medical Sciences*," and not to the *Psychological Journal*, nor to the Lectures in the *Lancet*, as is conjectured by your correspondent.

I quoted Dr. Hitchman's words in reference to the morbid condition of the grey matter in "*acute sthenic mania*," in order to contrast them with the very opposite—i. e. "*contradictory*" expressions of CONOLLY and SOLLY. It does seem strange that whilst the colour of the *cineritious neurine* is by the first-named writer said to be of a "*roseate hue*," the same is declared by the second to be of "*a dark plum colour*," and by the third as "*generally very pale*."

So far, Mr. Editor, I am responsible for no "*error*," or "*distortion*," or "*misrepresentation*;" and this much Dr. Hitchman will, I doubt not, allow; on reconsideration.

Your correspondent complains that I have given "no further elucidation of his opinions—except such extracts as would lead the reader to believe that he limited the physical causes of insanity to a roseate condition of the cerebral hemisphere." Even if this assertion were not an "*error*" I feel that no kind of blame could be, even then, attached to myself, seeing that I was not engaged in an exposition of Dr. Hitchman's views on psychological medicine, but rather in the attempt to demonstrate the reasons for additional investigation and farther inquiries into this department of science. However, at page 11, I see that I have quoted the following words from Dr. Hitchman. These have very certainly escaped his attention, because they cannot by any possibility lead the reader of my humble performance to believe that he (Dr. Hitchman) "*limits the physical causes of insanity to a roseate condition of the cerebral hemispheres*," viz., "*insanity is essentially dependent on some change or irritation produced in the vesicular neurine of the convolutions of the brain; and that malady is influenced by the same laws, and dependent on like physical changes of material structure, as are diseases of the lungs or any other viscera*."

As Dr. Hitchman has concluded his communication to your journal by placing in direct opposition certain extracts from my "*Nature and Proximate Cause of Insanity*," and certain other quotations from his own published writings contained in various medical journals, and inasmuch as the similarity of opinions therein conveyed, when taken in conjunction with their respective dates, would seem to imply that I had borrowed somewhat largely of his labours and opinions, I may be permitted to add that long ere Dr. Hitchman wrote on *insanity*, I had thus expressed myself. And my thanks are due to Dr. Hitchman "*for confirming my opinions in language so like my own as the following*," viz.:—

HITCHMAN.

"I believe that before the scalpel can reveal opacity, thickening, and infiltration of the membranes, or congestion, inflammation, softness, or hardness of the medullary matter, there must have been great and important changes long going on; and that necroscopic appearances ought to be regarded more as *results* than causes—as the *effect* rather than the *source* of the malady."—*Lancet*, vol. ii. 1847, p. 564. (Reprinted in the *Psychological Journal* for October 1st, 1853.)

DAVEY.

"If we imagine an individual labouring under intense *avarice, grief, or pride*, it would follow that the increasing physical action of the same portion or portions of the brain would tend to the development of such a state of susceptibility or *irritation* of the part or parts concerned, that, at length, the volition would become suspended; or, in other words, the morbid action would acquire so great a supremacy as to subjugate every other feeling and propensity; and which of course, must be, as above asserted, incompatible with the healthy physical capacities of the cerebral mass. If such an abnormal state remains unrelieved, nothing is more likely than the occurrence of inflammation of the brain and its membranes, more or less insidious, and which progressing would necessarily induce those *palpable* disorganizations of structure, effusions, &c., so commonly observed. Such, I repeat it, are generally the *EFFECTS* of insanity, and not its first *CAUSE*."—*Zoist*, vol. i. 1843, p. 116.

Such, Mr. Editor, is my reply to the strictures of Dr. Hitchman.

May I be permitted to make a few observations in reference to *one* remark in your notice of my small book?

The reviewer writes thus:—"We confess that we are not aware that the *theory*" (meaning that one propounded in Dr. Henry Munro's book), "*was distinctly announced by the present author*" (meaning myself) "*in his former publications, although*" (it is added) "*enough was stated to establish, inferentially, a corresponding idea in the mind of the writer; but in a manner as in no way to detract from the claims, such as they are, of the preceding theorist,*" meaning Dr. H. Munro.

The annexed passages from the book of Dr. Henry Munro and those by myself,* if placed in juxta-position, with their respective dates, will directly settle the question of priority; and in asking you for the necessary space in the columns of your journal to prove the point at issue, I trust I may not, under the present circumstances, be considered either egotistical or intrusive:—

MUNRO.

"Insanity is a disease of nervous origin."—p. 79. (1851.)

* * * * *

"The positive symptoms of insanity reveal a greater resemblance to those of *nervous irritation* than to those of acute inflammation of the brain."—p. 85. (1851.)

* * * * *

In insanity "there is no fever, the face is pallid, *the skin damp and cold*; everything about the body giving the indication of anything but inflammatory

* See ZOIST, Vol. i., p. 111, *et seq.*, 1843, "On the Pathology of Insanity," by "Dr. Davey, of the Hanwell Lunatic Asylum." An Essay written with the express object of reconciling the contradictory statements of Jacobi Calmeil, Foville, and others, and of showing upon what grounds the several pathological changes occurring to the brain and its membranes in insanity, and described by these writers, are to be viewed as the mere *effects* of an antecedent *cause*, &c. &c.

action; and yet the mind is in a state of most extravagant delusion."—p. 82. (1851.)

* * * * *
 "Therefore, though persons suffering from general debility are a good specimen for showing the asthenic nature of this disease."—p. 70. (1851.)
 * * * * *

"But my chief fear is that I may appear to be straining at a gnat, which is most easy to swallow, in writing so much as I have done to fortify my position of the nervous nature of this disease—since everything about it so clearly points out the truth of this position; *its mode of access*, so frequent after excitement, and exhaustion of the nervous system, after paralyzing shocks, after the action of depressing passions, *after drains to the bodily system*, as in puerperal insanity from over-nursing, &c.; again, *its mode of departure*."—p. 71. (1851.)

"The *comprehensiveness* of the theory is one of its greatest advantages; for it can include, equally, the insanity arising from moral shocks, from bodily disease, or from an actual lesion of the brain itself; while, if we rest content with an emotional cause alone, how could we account for the insanity produced on a sudden by a moral shock? and, on the other hand, if we looked to mental causation alone, how could we account for that produced evidently by bodily disease or physical injury?"—p. 79. (1851.)

"On the *relation* inflammatory action bears to insanity, my view of this important subject is, that no doubt frequently great congestions, and sometimes inflammatory action in the brain, take place in persons subject to insanity; that when they do so take place, **THEY AGGRAVATE THE VIOLENCE OF SYMPTOMS IN ALL CASES**; and very probably in many cases the insane paroxysm does not occur until the infirm brain is subjected to this deleterious influence; 2. That this inflammatory action is to be considered of an *asthenic* nature; 3. That inflammatory action can, under no view of the case, be the original cause of insanity; 4. That it cannot be looked upon as a condition essential to insanity; 5. That the presence of inflammation confirms rather than invalidates the theory that insanity is a disease of nervous and vital depression."—p. 81. (1851.)

"Good diet and strengthening medicines will quiet their furor when depletory measures increase it."—p. 115. (1851.)

"All enlightened physicians will prefer the invigorating influence of good diet to any mere theoretic or artificial modes of improving their patients' health. Bitter tonics are often useful."—p. 140. (1851.)

DAVEY.

"I consider insanity to be essentially a *nervous disease*, and the consequence of an *irritation* of the ultimate structure of the brain—a *neuralgia* of its sensory fibres."—*Zoist*, vol. i. p. 117. (1843.)

* * * * *
 "The exceptions to this *rule* are cases consequent on meningeal or cerebral inflammation—whether or not dependent on local injury. What very materially confirms the above position is the fact that the most violent forms of furious mania commonly occur in persons of *weak and delicate fibre*, and great susceptibility. I frequently witness the most urgent symptoms of acute insanity in combination with a small and feeble and quick pulse, *cold skin*, and a retracted and anxious countenance."—*Zoist*, vol. i. p. 117. (1843.)
 * * * * *

"I cannot help thinking it almost impossible for any medical man well acquainted with the nature and peculiarities of the various forms of insanity, to entertain adverse opinions to those contained in this paper; but so it is.

"They should well remember that attacks of insanity, even recent ones, are,

occasionally, not only as sudden in their occurrence as those of *neuralgia*, *hysteria*, &c., but are also no less temporary, and equally severe, comparatively speaking; and, like the last-named diseases, may be either idiopathic or symptomatic. Moreover, it (insanity) is among the effects of a severe hæmorrhage, or *loss of blood*; and is then to be cured only *by a removal of its cause*.

"How could all this happen if it depended on an *inflammation* of any part of the brain or its membranes?"—*Zoist*, vol. i. p. 119. (1843.)

"No one can doubt that every single thought and feeling is associated with certain physical and *molecular* changes in some part or parts of the brain; and, if so, every case of insanity, however slight and temporary, must consist of an abnormal action of a portion of its ultimate structure; and this continuing to increase in intensity and extent so affects the vascular condition of the brain and its membranes that to it at length we become indebted for the more palpable and demonstrable pathological conditions already spoken of. Now the varieties and innumerable modifications of altered structure, as regards locality, &c. &c., are of course no less dissimilar than the several indications of insanity or abnormal cerebration; and therefore we are enabled *to account*, as before mentioned, not only for the *contradictory* opinions already specified, but also for the *association of similar pathological appearances, whether of the brain or membranes, with very opposite manifestations of the disorder*."—*Zoist*, vol. i. p. 113. (1843.)

"It may be added that the morbid appearances noticed in those who have died of insanity, *for the most part*, hold the same relation to each other that those common to *asthma*, *hooping-cough*, and *angina pectoris* do to these several diseases respectively." . . . "The analogy between the above-mentioned diseases does not end here, for not only are very similar remedial means applicable to them all, both in their complicated and uncomplicated states, but in each one the pathologist not unfrequently verifies the following words of an eminent living writer, viz., '*Changes may take place in the nervous system not only sufficient to cause the most acute disease, but even to subvert life, without being so gross as to be demonstrable to the senses*.' If, however, these same '*changes*' are not sufficiently intense to destroy the life of the individual, the chances are they become, eventually, succeeded by others of a very palpable and demonstrable nature, which are not only sufficient in themselves to very seriously impair the healthy function of the part or parts concerned, but existing, as they may be presumed to do, in common with their *first cause*, NECESSARILY AGGRAVATE ALL THE SYMPTOMS OF DISEASE. Among the insane, this precise state of things robs progressively the whole nervous system of its power, and as a consequence every vital function becomes more and more impeded and enfeebled; and the suffering party is left only to vegetate and die."

* * * * *

"The very common indications of the existence of past or present inflammatory action of the brain or membranes, I consider a proof of not only the *occasional* association of the disorder (insanity) with inflammation, as its immediate cause; but also of the *frequent* occurrence of such in the progress of insanity: that is, of that form of disease consequent on "*nervous irritation*."

"The *origin and progress* of many cases of insanity, are sufficient to verify this position. Suppose, for the sake of illustration, that an individual of delicate fibre is suddenly frightened by some cause or other, and instead of her recovering from the consequences of alarm, they continue with aggravated severity."

"The faintest sound which reaches her ear is construed into a renewal of the first cause of her deep affliction; the gentlest wind which may happen to blow seems to threaten her yet more sorely."

"Every surrounding object appears, at length, tinctured with the cause of

her misery; and each effort of herself and friends to shake off the horrid incubus is in vain."

"Time rolls on only to show how much she is the instrument of her involuntary feelings; and then the judgment is betrayed into acquiescence. She no longer merely feels her sufferings, but she seeks a cause for them; one which shall not only excuse them to herself, but be in strict harmony with her predominant feelings. And, thus, in passing from bad to worse, she realizes the precise condition of one labouring under *acute mania*."

"The disease is, in such a case, *the necessary effect of an irritation of the ultimate structure of the brain*; and the consequence, only, of the application, through the medium of the external senses, of a stimulus so intense as to prove incompatible with the healthy physical capacities of the organ." . . . "If such an abnormal state of the cerebral mass remains unrelieved, nothing is more likely than the occurrence of inflammation of the brain and its membranes, more or less insidious; and which progressing would necessarily induce those palpable disorganizations of structural effusions, &c., so generally observed."

"Such, I repeat it, are *generally the effects* of insanity, and not its *first cause*."

"The patients in Hanwell are very liable to attacks of cerebral and meningeal inflammation, and which not unfrequently prove the immediate cause of death. In such cases the general symptoms which indicate the existence of inflammatory disease assume the same *asthenic* characters which belong to peripneumonia, eulceritis, erysipelas, &c. &c., when occurring in *nervous and irritable* subjects. Upon the principle that such persons are more liable to the ordinary derangements of the general health, of which chronic inflammatory diseases form a great part, so are the insane *predisposed* to the occurrence of cerebral and meningeal inflammation, and *hence* the ordinary appearances observed after death."—*Zoist*, vol. i. p. 115, 116, 117. (1843.)

"The most appropriate and successful treatment consists in the administration of sedatives, with a generous diet, and the employment of those means calculated to improve the general health."

* * * * *

"Insanity, like other *nervous* diseases, is, invariably, aggravated by general bleeding."

* * * * *

"Many cases are cured in Hanwell by the use of wine and steel medicines."—*Zoist*, vol. i. p. 117. (1843.)

I feel, Sir, I need not make any remarks on the foregoing extracts: that they settle the question of PRIORITY, in so far as Dr. H. Munro and myself are concerned—to say nothing whatever of *Dr. Hitchman*—will be directly apparent to yourself and your numerous readers.

You will perceive, then, that my "*Nature and Proximate Cause of Insanity*" (which you have done me the honour to notice in your *valuable journal*—I quite mean this, in spite of my phrenological complainings,) is very like a SECOND EDITION of my paper "ON THE PATHOLOGY OF INSANITY," as contained in vol. i. of the *Zoist*, and dated July, 1833, (*more than ten years since*.)

To conclude, you write in the last No. of the PSYCHOLOGICAL—"There is no difference between the theory of Munro and Davey." I would add, in all deference, there is just this dissimilarity—"Dr. H. Munro limits the disease to ONE especial cause," to quote your own words, whereas I maintain that "insanity is of two kinds, the one" (which is much the more common) "dependent on nervous irritation of the brain; and the other on inflammation, involving either the brain or its membranes."* The following few words were.

* See *Zoist*, vol. i., 1843.

written in 1848, nearly three years before the publication of Dr. H. Munro's book, viz.:—"All those cases" (of insanity) "which owe their origin to a *physical* cause, are certainly inflammatory in their nature, and depend mainly on an increased vascularity of a particular portion or portions of the brain; but it is far otherwise with those cases of insanity induced by moral causes. If the disorder succeed to a severe and overpowering moral impression, to any great disappointment or alarm, or to outraged feeling of any kind, involving a sudden, unexpected, or violent shock of the nervous system, through the medium of any portion of cerebral matter, then are we disposed to attribute the phenomena observed *not* to inflammation, but to *nervous irritation* of the ultimate structure of the brain."*

In my *contributions to mental pathology*, published just one year before Dr. H. Munro's book, it is plainly seen that the foregoing opinions are much *exemplified* in certain parts,—*e. g.*, see pages 45, 97, 98, 100, 181, 192, 200, 201, 208, 219, 222, 223, 224, 225, 227, and 228.

The work of Dr. H. Munro, though professing to be written with a *specific object*,—viz., that of proving the atonic character of insanity, is, nevertheless, in good part, devoted to the consideration of other and extraneous questions,—viz., "the classification of the insane;" "arguments for the corporeal nature of insanity;" "the nature of ramollissement;" "the cause of general paralysis;" remarks on "Dr. Burnett's theory;" "statistics of Bethlem Hospital;" "note on phrenology," &c. &c.

The *theory*, therefore, constitutes rather the *ostensible* than the *real* basis of the volume; however, I have no wish to undervalue Dr. H. Munro's book; far from it.

I beg to remain, your obedient servant,

JAMES GEORGE DAVEY, M.D., &c. &c.

Northwoods, Bristol, November 2nd, 1853.

A SUBJECT FOR PSYCHOLOGICAL ADJUDICATION.

WE copy the subjoined paragraphs from the foreign correspondence of the *Times*, March 13th, and the *Observer* of March 19th. "Authentic accounts from St. Petersburg (says the *Times*) describe His Majesty to be in a state of great nervous excitement—at one time elated by the consciousness of the divine mission to extirpate infidelity and liberalism from the face of the earth, at another labouring under the greatest depression of spirits—suspecting all around him, even his most attached friends, of treachery—picturing to himself the future in the most gloomy colours, and not unfrequently fancying that his end is destined to be one of violence. He is, it appears, often oppressed with this dark cloud, and the symptoms of that malady which has more than once affected his family are evident." The following is from the *Observer*:—"All the efforts of the Russian Government tend to give to the impending struggle a character of religious ardour which is not that of 1812. Thus the Greek cross appears everywhere as the sanctifying symbol of the present war, and on every side we hear the words repeated of 'Orthodox faith,' 'Holy confidence,' 'Holy Russia,' &c. Texts from the Holy Scriptures have come to be mingled with the jargon of the fashionable saloons. The Emperor himself adopts them in conversation of the most ordinary kind, and in all his public addresses, and he appears struck with the *monomania* of preaching and haranguing to all about him in a manner that is truly ridiculous. Very

* See my *Contributions to Mental Pathology*. 1850.

recently, and in presence of his whole court, he delivered a sort of sermon, which terminated nearly with the following words:—"Russia, whose destinies God has especially entrusted to me, is menaced. But woe, woe, woe to those who menace us. We shall know how to defend the honour of the Russian name, and the inviolability of our frontier. Following in the path of my predecessors—faithful, like them, to the orthodox faith—after having invoked, like them, the aid of the Almighty God—we shall await our enemies with a firm foot, from what side soever they come, persuaded that our ancient device, "The Faith, the Czar, and the Country," will open to us, as it has ever done, the path of victory. *Nobiscum Deus, audite populi; et vincimini, quia nobiscum Deus.*" The imperial court was astounded: it never suspected that the Czar possessed this biblical erudition, and could scarcely contain its astonishment. It never suspected that his Majesty was so profoundly versed in Scripture, or in the Latin fathers. It is certain that for some time past most people are convinced that something extraordinary is the matter with the Emperor, for while his memory appears not to have failed him, his other mental faculties appear to have been seriously affected. He has become sombre and morose to an intolerable degree, either from the effect of years, or of the annoyances or embarrassments in which he sees himself placed. Perhaps all combine to produce this effect. The result is a state of exasperation which he can scarcely keep within bounds, even in presence of foreign ministers."

Would not the peace of the world have been preserved, and the valuable lives of thousands been spared, if this morbid condition of mind could have been recognised some months back, and attempts made to bring the unhappy sufferer within the range of remedial measures. It is not unreasonable to imagine that if a few leeches and blisters had been applied to the Imperial head, and his Majesty had been subjected to a course of purgation, warm bathing, and the application of the douche, the great calamity of an European war would, in all probability, have been averted, and the country rescued from the terrible infliction of an increased income tax! In a case like this the physician would have done more service than the diplomatist, and isolation and medical treatment have superseded the necessity for protocols, and have saved the Government from the expense of sending a Queen's messenger to St. Petersburg with the *ultimatissimum*.

ON THE CONSTRUCTION OF HOSPITALS FOR THE INSANE.*

I. EVERY hospital for the insane should be in the country, not within less than two miles of a large town, and easily accessible at all seasons.

II. No hospital for the insane, however limited its capacity, should have less than fifty acres of land, devoted to gardens and pleasure-grounds for its patients. At least one hundred acres should be possessed by every State hospital, or other institution for two hundred patients, to which number these propositions apply, unless otherwise mentioned.

III. Means should be provided to raise ten thousand gallons of water, daily, to reservoirs that will supply the highest parts of the building.

IV. No hospital for the insane should be built, without the plan having been first submitted to some physician or physicians, who have had charge of a similar establishment, or are practically acquainted with all the details of their arrangements, and received his or their full approbation.

* These and the subjoined suggestions with reference to the "organization of Hospitals for the Insane," are made by the "Association of Medical Superintendents of American Institutions for the Insane."

V. The highest number that can with propriety be treated in one building is two hundred and fifty, while two hundred is a preferable maximum.

VI. All such buildings should be constructed of stone or brick, have slate or metallic roofs, and, as far as possible, be made secure from accidents by fire.

VII. Every hospital, having provision for two hundred or more patients, should have in it at least eight distinct wards for each sex, making sixteen classes in the entire establishment.

VIII. Each ward should have in it a parlour, a corridor, single lodging-rooms for patients, an associated dormitory, communicating with a chamber for two attendants; a clothes-room, a bath-room, a water-closet, a dining-room, a dumb waiter, and a speaking-tube leading to the kitchen, or other central part of the building.

IX. No apartments should ever be provided for the confinement of patients, or as their lodging-rooms, that are not entirely above ground.

X. No class of rooms should ever be constructed without some kind of window in each, communicating directly with the external atmosphere.

XI. No chamber for the use of a single patient should ever be less than eight by ten feet, nor should the ceiling of any story occupied by patients be less than twelve feet in height.

XII. The floors of patients' apartments should always be of wood.

XIII. The stairways should always be of iron, stone, or other indestructible material, ample in size and number, and easy of ascent, to afford convenient egress in case of accident from fire.

XIV. A large hospital should consist of a main central building with wings.

XV. The main central building should contain the offices, receiving-rooms for company, and apartments entirely private, for the superintending physician and his family, in case that officer resides in the hospital building.

XVI. The wings should be so arranged that, if rooms are placed on both sides of a corridor, the corridors should be furnished at both ends with moveable glazed sashes, for the free admission of both light and air.

XVII. The lighting should be by gas, on account of its convenience, cleanliness, safety, and economy.

XVIII. The apartments for washing clothing, &c., should be detached from the hospital building.

XIX. The drainage should be under ground, and all the inlets to the sewers should be properly secured, to prevent offensive emanations.

XX. All hospitals should be warmed by passing an abundance of pure, fresh air from the external atmosphere, over pipes or plates, containing steam under low pressure, or hot water, the temperature of which at the boiler does not exceed 212° F., and placed in the basement or cellar of the building to be heated.

XXI. A complete system of forced ventilation, in connexion with the heating, is indispensable to give purity to the air of a hospital for the insane; and no expense that is required to effect this object thoroughly can be deemed either misplaced or injudicious.

XXII. The boilers for generating steam for warming the building should be in a detached structure, connected with which may be the engine for pumping water, driving the washing apparatus, and other machinery.

XXIII. All water-closets should, as far as possible, be made of indestructible materials, be simple in their arrangement, and have a strong downward ventilation connected with them.

XXIV. The floors of bath-rooms, water-closets, and basement stories, should, as far as possible, be made of materials that will not absorb moisture.

XXV. The wards for the most excited class should be constructed with rooms on but one side of a corridor, not less than ten feet wide, the external windows of which should be large, and have pleasant views from them.

XXVI. Whenever practicable, the pleasure grounds of a hospital for the insane should be surrounded by a substantial wall, so placed as not to be unpleasantly visible from the building,

ON THE ORGANIZATION OF HOSPITALS FOR THE INSANE.

I. The general controlling power should be vested in a Board of Trustees, or Managers; if of a State institution, selected in such manner as will be likely most effectually to protect it from all influences connected with political measures or political changes, if of a private corporation, by those properly authorized to vote.

II. The Board of Trustees should not exceed twelve in number, and be composed of individuals possessing the public confidence, distinguished for liberality, intelligence, and active benevolence; above all political influence, and able and willing faithfully to attend to the duties of their station. Their tenure of office should be so arranged, that when changes are deemed desirable, the terms of not more than one-third of the whole number should expire in any one year.

III. The Board of Trustees should appoint the Physician, and on his nomination, and not otherwise, the Assistant Physician, Steward, and Matron. They should as a board, or by committee, visit and examine every part of the institution, at frequent stated intervals, not less than semi-monthly, and at such other times as they may deem expedient, and exercise so careful a supervision over the expenditure and general operations of the Hospital, as to give to the community a proper degree of confidence in the correctness of its management.

IV. The Physician should be the Superintendent and chief executive officer of the establishment. Besides being a well-educated physician, he should possess the mental, physical, and social qualities to fit him for the post. He should serve during good behaviour, reside on, or very near the premises, and his compensation should be so liberal, as to enable him to devote his whole time and energies to the welfare of the hospital. He should nominate to the Board suitable persons to act as Assistant Physician, Steward, and Matron. He should have entire control of the medical, moral, and dietetic treatment of the patients, the unrestricted power of appointment and discharge of all persons engaged in their care, and should exercise a general supervision and direction of every department of the Institution.

V. The Assistant Physician, or Assistant Physicians, where more than one are required, should be graduates of medicine, of such character and qualifications as to be able to represent and to perform the ordinary duties of the Physician during his absence.

VI. The Steward, under the direction of the Superintending Physician, and by his order, should make all purchases for the institution, keep the accounts, make engagements with, pay, and discharge those employed about the establishment; have a supervision of the farm, garden, and grounds, and perform such other duties as may be assigned him.

VII. The Matron, under the direction of the Superintendent, should have a general supervision of the domestic arrangements of the house; and under the same direction, do what she can to promote the comfort and restoration of the patients.

VIII. In institutions containing more than two hundred patients, a Second Assistant Physician and an Apothecary should be employed; to the latter of whom other duties, in the male wards, may be conveniently assigned.

IX. If a Chaplain is deemed desirable as a permanent officer, he should be

selected by the Superintendent, and, like all others engaged in the care of the patients, should be entirely under his direction.

X. In every Hospital for the Insane, there should be one Supervisor for each sex, exercising a general oversight of all the attendants and patients, and forming a medium of communication between them and the officers.

XI. In no institution should the number of persons in immediate attendance on the patients be in a lower ratio than one attendant for every ten patients; and a much larger proportion of attendants will commonly be desirable.

XII. The fullest authority should be given to the Superintendent to take every precaution that can guard against fire or accident within an institution, and to secure this an efficient night-watch should always be provided.

XIII. The situation and circumstances of different institutions may require a considerable number of persons to be employed in various other positions; but in every hospital, at least all those that have been referred to are deemed not only desirable, but absolutely necessary, to give all the advantages that may be hoped for from a liberal and enlightened treatment of the insane.

XIV. All persons employed in the care of the insane should be active, vigilant, cheerful, and in good health. They should be of a kind and benevolent disposition; be educated, and in all respects trustworthy; and their compensation should be sufficiently liberal to secure the services of individuals of this description.

ST. LUKE'S HOSPITAL.

A MEETING of the governors of this institution was held on Friday last, at the George and Vulture Tavern, City, for the purpose of receiving the resignation of Dr. Philp, formerly proprietor of Kensington House Lunatic Asylum, and for many years one of the visiting physicians of this hospital. Several gentlemen expressed their regret at the retirement of Dr. Philp, to whom a cordial vote of thanks was passed for the unremitting attention, ability, and zeal with which he had discharged the duties of physician to the hospital—an office he had held for twelve years. The 21st of April was fixed for electing a successor. The candidates at present announced are Dr. H. Munro, and Dr. Parker, of the London Hospital, and Dr. Arlidge.

Notices to Correspondents.

WE have been compelled again to refuse several American periodicals, for which extravagant postage has been demanded.

We have been obliged to postpone the publication of several notices of British and Foreign works and periodicals until our next Number. Among these is the new edition of Dr. Conquest's "Outline of Midwifery," edited by Dr. J. M. Winn. We strongly recommend this excellent manual to the attention of our professional brethren. Its utility has been materially increased by the valuable annotations of the Editor. We should have scarcely recognised the work in its new dress. Numerous additional illustrations have been interspersed throughout the text, and several entirely new sections introduced on the subject to which it specially relates.

To give an analysis of the Editor's commentaries, which are in themselves a condensed analysis of nearly all that has been written on obstetric science during the last 16 years, would occupy too much of our space.

We scarcely know any work which contains more valuable matter in so small a compass as this work; and we strongly recommend it to the student, as one of the cheapest and best works of the kind extant. The profession ought to feel deeply indebted to Dr. Winn, for the great care and ability with which he has evidently edited this valuable manual.

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OF
PSYCHOLOGICAL MEDICINE
AND
MENTAL PATHOLOGY.

JULY 1, 1854.

ART. I.—THE PSYCHOLOGY OF MONOMANIACAL
SOCIETIES AND LITERATURE.

IN a previous essay we gave a cursory consideration to a wide-spread popular delusion, which had taken the form of demonology and divination, or "the black art." We then thought it probable that, as "one fire puts out another burning," and *similia similibus curantur*, this more recent absurdity would extinguish, or at least counteract, the follies of mesmerism. In this idea we were mistaken; for, just as a monomaniac converts all current ideas into food for the delusive ideas which actuate him, and finds their corroboration in facts as widely apart as possible, so the large group of monomaniacal visionaries convert everything analogous to their purpose, and derive fresh impulses from follies and delusions greater (if that be possible) than their own. Thus we find that homœopathy and hydropathy, like two drunken strollers, mutually support each other; and thus, too, mesmerism finds in modern necromancy, and in every delusion of sorcery and magic, current in all ages and amongst all peoples, the strongest proof of the verity of its doctrines.* We do not propose to treat these visionaries

* *Magie Magnétique, ou Traité historique et pratique de fascinations, de miroirs cabalistiques, d'apports, de suspensions, de pactes, de talismans, de charme des vents, de convulsions, de possessions, d'envoûtements, de sortilèges, de magie de la parole, de correspondance sympathique, de nécromancie, &c.* Par L. A. Cahagnet, auteur des Arcaues de la Vie Future Dévoilés, &c. Paris, 1854.

with contempt, or to assail their doctrines with abuse. The greater number deserve neither. The enthusiasm and moral courage the majority display, present, when considered abstractedly, something commendable. Some of them, at least, are *honest* (albeit ignorant and superstitious) seekers after truth; and are not to be confounded with the knaves who prey upon their simple credulity. Their good qualities, indeed, commend them to our sympathy; and being so commended, we think we shall do them service if we endeavour to trace to their origin the influences by which honest, pains-taking, and earnest inquirers into truth are led onward from one absurdity to another, each greater than the last, until the climax is reached, and monomania, insanity, or imbecility, tragically end the comedy.

What we find before us is just this. A very considerable number of persons write books, read them, and associate themselves together, whose object is the investigation of propositions and the promulgation of doctrines which either shock our common sense by their absurdity, or wound our religious feelings by their impiety, or excite our contempt by their inanity. The absurdity, impiety, and inanity are so flagrant, indeed, that it seems to be hardly necessary to state in so many words these characteristics of the doctrines advanced; but, on the other hand, the promulgators themselves entertain a widely different opinion of their views and of their proceedings. In their own estimation they are persecuted lights of the world, of whom the world is hardly worthy; martyrs to science and to progress; unappreciated and incomprehended investigators of the mysterious unknown in physics and psychology; discoverers of new worlds of phenomena and forces. Why this difference?

We believe the whole class of visionaries to be more or less affected with monomania. They have eaten of "the insane root which takes the reason prisoner." Not insane metaphorically, but practically and pathologically; they are inoculated with a "fixed idea" by a process of mental operations not dissimilar from those known under the term *electro-biological*, or are actually insane.

We will first describe the symptoms of the case. As they show themselves in the *mass*, the nature of the delusions of these monomaniacs is tolerably well shown by the titles of works published by M. Cahagnet, according to the list on the paper cover of the work before us. First, we have the delusive ideas entertained as to the relations of the soul with the present and future world, indicated by—

"*The Arcana of the Future Life Unveiled*; a work containing unanswerable proofs of the faculty possessed by magnetic somnambulists of seeing the departed, and conversing with them."

"*The Sanctuary of Spiritualism*, a study of the human soul and its

relations to the universe, in reference to somnambulism and ecstacy; showing to every person the means of entering into the ecstatic state at will."

"*The Light of the Dead*, or studies, magnetic, philosophical, and spiritualistic; dedicated to the liberal thinkers of the nineteenth century."

"*Magnetic Spiritualistic Encyclopædia*, treating specially of psychological facts, magnetic magic, Swedenborgianism, necromancy, celestial magic," &c.

The readers of these works, with other human beings, are gregarious; they communicate to each other their ideas and discoveries—the means being a *society*, and an organ of the society, or *journal*. This is—

"*The Spiritualistic Magnetiser, a Journal of the Spiritualistic Magnetisers of Paris*, treating of very curious facts of apparitions, of possessions, of psychological questions."

The *material* forces, as distinguished from the spiritual, are not neglected by the sect of whom M. Cahagnet seems to be the apostle; for the "Od force" of Reichenbach is believed in and discussed for them by that writer.

"*Odic Magnetic Letters* of the Baron von Reichenbach, translated from the German, with an estimate, by the author of the '*Arcana*,' of the phenomena of the fluidic currents which the three kingdoms manifest."

It is always a weakness with these visionaries to believe that their doctrines possess a practical application; they therefore laboriously endeavour to demonstrate their usefulness. Hence books like the following:—

"*The Treatment of Disease by the Extatic*, Adèle Maginot. Studies on the medicinal properties of 150 of the most common and best known plants, with various methods of magnetization."

The "Magie Magnétique" is a work which is best described in the author's own words:—

"It is the fruit of patient studies, of patient observation, and not less patient experiments. It will teach little to the studious magnetiser, for it appears to be reserved for us in this age of darkness (termed enlightened) to have no other duty than to go back to the past, for the purpose of studying the labours of our fathers, and to appropriate them, as a proof of progress, and not as a simple heritage; and to forget them sufficiently, that we may loudly exclaim, 'In no age were discoveries so common as they are in ours.'"

These labours referred to is the farrago of superstitions and frauds, which M. Cahagnet catalogues on his title-page, and the facts of which he receives as philosophical facts worthy of all credence, and clearly proving the doctrines of magnetism. An alphabetical list of these

labourers comprises the most anomalous names—Gregory VII. precedes Hermines, Isaac, Jambres, Jannes; Medea, Merlin, and Mesmer come together, and are followed by Swedenborg, Trois Echelles, and Tubal-Cain. Everything absurd unintelligible, and mysterious, is within the domain of magnetism. The following is a portion of M. Cahagnet's decalogue—a sort of catechism of the powers of the so-called science :

“ Can the cataleptic condition be induced by magnetism ?—Yes.

“ Can the powers of a magnetic subject under your influence be diminished or increased threefold ?—Yes.

“ Can the effects of attraction be produced in this subject—as all magnetisers declare they have produced—not only on living beings, but on dead matter ?—Yes.

“ Can they cause the suspension of material bodies by the same effect of attraction ?—Yes.

“ Can certain subjects in the magnetic state perform certain gymnastic movements, which are contrary to the laws of anatomy ?—Yes.

“ Can a being in that state attain to a height far beyond that of his natural size ?—Yes.

“ Can he walk upon points of support contrary to the constitution of his nature and the laws of equilibrium ?—Yes.

“ Can he induce on his person excessive local and general inflammations ?—Yes.

“ In this state can he, with his eyes closed, see either by the nape of his neck, the plexus, the heels, at immeasurable distances, and hear what is said there ?—Yes.

“ Can the so-called spirit, when separated from matter, form material vehicles ? (*des supports matériels.*)—Yes.

“ Can the lucid speak many languages previously unknown to him, and acquire a knowledge of science of which he has always been ignorant ?—Yes.

“ Can he in this state defy the action of fire or of poisons ?—Yes.

“ Can he enter into communion with the dead, speak to them, and obtain useful knowledge from them ?—Yes.

“ Can the magnetiser beset his subject by sounds which he causes him to hear at a distance ? In like manner, from a distance, can he exercise an attraction upon him ? produce before him ghosts or other phantasms ? and compel him to do things contrary to his peace of mind, to good morals, and to honour ?—Yes.

“ Can the magnetiser in this way render his victim idiotic and imbecile, or even destroy him, without leaving any visible marks ?—Yes.

“ Can he communicate to him any particular disease, or deprive him of the use of a limb ? Yes.

“ Can he give him blows at very great distances ?—Yes.

“ Can he bewilder him on his way, make him leap ditches (as you have assured me), place stumbling-blocks before him on the level road, cause robbers or ferocious beasts to appear to him ?—Yes.

“ Can man cast stones into distant localities without being seen,

bewitch the soil, gardens, animals, and men, as is stated in all works on sorcery?—Yes.

“Can he act upon masses of men at the same time, causing them to see, touch, and eat things, real apparently, but in fact imaginary only?—Yes.

“Can man have disembodied spirits subject to him, and be served by them?—Yes.

“Can he at his pleasure excite, or cause to cease rain, winds, hail?—Yes.”

The supposed questioner (for the book is in form of a dialogue) candidly remarks that assertion is not proof; whereupon the author declares that although he cannot show the means by which all these marvels have been effected, he will prove that they have been done, and that it is possible to effect them “by magnetism as the principal agent, aided by the infinite *combinations* of the human mind.” The proofs consist in a number of stories drawn from every branch of the literature which treats of the wonderful and mysterious, and details of experimental researches; they consist principally of three kinds—firstly, absolute inventions; secondly, tricks of conjuring and swindling; thirdly, phenomena analogous to those of mesmerism and electrobiology.

We shall defer for the present a more detailed account of the contents of this curious pathological work, reserving to a later period special instances of monomaniacal delusion which it contains. In the meanwhile we will adduce illustrations of this kind from other and very different sources, analysing in particular some of the monomanias with which the English public is perfectly familiar. The trivial and absurd are just as important by way of illustration as the more pretentious; we shall, therefore, select instances of both kinds. The better to display their source and progress, which are closely connected with the *association of ideas*, we shall commence with those in which a given idea is predominant, and the idea we choose is the *religious*.

The religious element of man's nature has (we need hardly remark) a close connexion with the occult and the wonderful. “*Faith is the evidence of things unseen*,” of things beyond reason and observation. M. Cahagnet shows that unhesitating faith is the basis of all his occult knowledge. The whole power of “magnetic magic” depends on the will; but, he adds, the human will has never been defined. “Faith alone,” he remarks, “is the *soul* of the will; it is its principal agent, its lever, its power, its life.” In the condition of absolute unhesitating faith “there are no longer impossibilities; the ordinary laws of nature are abrogated, and the inexplicable is revealed by the incomprehensible.” It is a natural consequence of this state of mind

that they who have faith in the occult in philosophy are not slow to add to it the mystical in religion. Whether there be a phrenological reason for the connexion between religious delusions and more material follies in the contiguity of organs, we do not pretend to say; certain it is that they are often intimately allied in all these various forms of monomania. As illustrations we subjoin the following. Morison, the *pill-merchant*, like many other fanatics, believed in his own absurdities. He maintained that the cause of disease in man which purging cleanses away, first entered into the blood of Adam and Eve at the fall, and is the infection, *par excellence*, of man's nature. He certainly, if the history of his own case be credible, was a confirmed hypochondriac. He says:—

“Reader, this was the cause from the beginning of my disease—want of all rest and comfort, and loss of fortune. *I frequently thought that I should go mad, and that I was possessed of a devil within me.* In the first periods of it, and when my other feelings were still acute, I would have taken up my abode in the sandy deserts of Africa to obtain a few nights' sound sleep, the common solace of mankind. You cannot imagine to yourself the anguish and pain of it; yet no one knew how to give me relief. At its commencement, thirty-eight years ago, it was only a simple humour that settled there. Reader, all your diseases and pains arise from a like cause; they must proceed from a humour. I defy all ingenuity to establish any other cause.”

Now, a monomaniacal idea of this kind is not of itself incompatible with shrewdness and cunning. Numerous instances of successful religious fanatics, the founders and leaders of sects, might be adduced in proof. Even where the ideas themselves are incoherent and the practical results ridiculous, the monomaniac exercises, in virtue of his singleness of idea, a power over weak and ignorant minds. There is a certain empiric wanderer about town, who is perhaps better known from his propensity to disturb public meetings by his wild errotchets than by his “Asthmatic Lamp, or Air Flame Magnet to Breath.—(xii. 5; Job. xxvii. 3).” The reader who is familiar with the literature of the insane cannot fail to recognise a well-known style in the following literal extract from this monomaniac's description of his lamp:—

“The *inventor's* reasons for a *dry air fumigation*—night and morning—in scrofula, in *cancer*, and in all cutaneous eruptions, is based on the *deliverance* from ‘king's evil,’ *by its drying up after eighteen day's use*, in the child ‘*Owen*,’ of No. 7, Derby-court, Jermyn-street, which event to *one* ‘that is ready to slip with *his* feet,’ is in perfect keeping with the *Almighty's* laws, viz. that as the flow of tide twice in twenty-

four hours purifies the waters of the globe, and in its undulatory movement, acts on the local temperature by atmospheric pressure, so in like manner under analogy with, and IN, the use of 'sulphate of zinc' in drinks, as giving a *vitriolic* cause for *morbid action*, or sudden clotting of the blood in persons."

The author of this insane rigmarole is only not a dangerous fanatic because he has not even an elementary knowledge of any science, and cannot write two ideas in normal association; yet even he has his followers and votaries. It is not long since, when an explosion of a coal mine in Scotland took place, that this monomaniac hastened to the locality, persuaded the friends of some miners that were hurt to submit them to his treatment; and when—as a necessary result of his foolish interference—he was put upon his trial for manslaughter, and a verdict of not guilty was announced, an enthusiastic audience of his admirers could not repress their delight at the result!

The heterogeneous sect which Hahnemann founded presents an interesting illustration of the working out of monomaniacal ideas from a common root. It has been long known that active medicinal agents produce morbid conditions not unlike those which they cure or relieve. Thus, a purgative (an irritant to the mucous surface of the intestinal canal) will relieve a disease (diarrhœa) caused by an irritant. An inflammation artificially excited on the skin checks inflammatory action elsewhere. The entire group of remedies termed *counter-irritants* may be mentioned as belonging to this class. Now, a German physician, following out this idea, found it applicable under circumstances not generally recognised or known; and passing to that hasty generalization from a few instances, which is the leading fault of all investigation of the occult, he promulgated the fundamental doctrine expressed briefly in the phrase, *similia similibus curantur*. This doctrine would soon have passed into the limbo of those hasty generalizations which specially abound in the history of medicine, leaving behind it a useful residuum of facts, had not Hahnemann been infected with that monomaniacal temper which exercises so potent a control over weak and ignorant people. Under another form, namely, the doctrine of *signatures*, the primary idea had already had its day, but Hahnemann claimed a special revelation to himself of the healing power of nature. In the doctrine of signatures it was maintained that the Divine mind revealed them to all alike who could read the signs or signatures in the external appearance of plants. "Eyebright," to the sagacious observer, revealed its valuable properties in the cure of dimness of vision by the form of its flower, and "liver-wort" its valuable properties in hepatic diseases by its liver-like appearance. Hahnemann, cunningly wise (as monomaniacs can be)

pretended to found his views both upon experience and revelation. He remarks, as to his Divine mission:—

“It was high time for the wise and benevolent Creator and Preserver of mankind to put a stop to this abomination (the ordinary method of treating the sick), to command a cessation of those tortures, and to reveal a healing art the very opposite of this, which should not waste the vital juices and powers by emetics, perennial scouring out of the bowels, diaphoretics, salivation, &c. . . . nor, in short, instead of lending the patient aid, to guide him in the way to death, as is done by the merciless routine practitioner. . . . it was high time that He should permit this discovery of Homœopathy. By observation and reflection I discovered that, in opposition to the old allopathic method, the true, the proper, the best mode of treatment is contained in the maxim,” &c.

Amongst the delusions of the insane hypochondriac none is more usual (as is well-known to practical men) than that the health is suffering from some constitutional taint or disease. We have seen that Morison entertained this delusion. In this country the syphilitic poison is most usually fixed upon by the insane as the imaginary *fons et origo mali*. Now, in Germany there is a very generally prevalent theory that *scabies* is a constitutional disorder, leaving behind it important changes analogous to those caused by the syphilitic virus. Hahnemann’s monomaniacal mind naturally seized upon this idea, and incorporated it with his other doctrines, thus giving rise to his psora doctrine. Psora (or itch) is, according to his views, “the origin of at least seven-eighths of all chronic diseases,” the other eighth resulting from “syphilis,” or “sycosis,” or a union of either or both with psora. It is, he says, a sin against humanity to consider the itch eruption as a local disease, and treat it by ointments or washes to drive it off the skin.*

Hahnemann invoked experience by experimental researches into the action of remedies, or “provings,” in the jargon of the sect. The basis of the method is, that a person who “proves” must take fasting about the same dose as is usually given in diseases, he must remain some hours longer fasting, and he must carefully observe himself.† A very slight knowledge of the physiology of the nervous system is only needed to convince the reader that no better method could be devised for exciting those sensorial changes which unquestioning faith and morbidly excited acts of *attention* are well known to produce. Hahnemann very quickly, therefore, came to the conclusion that very small, indeed immeasurably small doses of remedies produced powerful effects.

* The British Journal of Homœopathy, July, 1849, p. 349.

† Ibid. p. 341.

From this to the doctrine that mystic forces developed by trituration and succussion rendered them more powerful, or "potentized" them, was only a step, and so the infinitesimal theory was founded. We have, then, in Hahnemann's writings these notions developed :—1. That he was specially inspired by the Divine mind, and that therefore the system he proposes to overthrow is utterly wrong. 2. That Divine Providence has provided special medicinal agents antagonistic to every ill. 3. That there is an occult source of bodily disorder from which every special disease arises—psora. 4. That there are occult powers in the means provided by Divine Providence, which may be developed by certain manipulations, namely, trituration and succussion.

These insane propositions (for no one of which there exists the slightest foundation in fact) were not so insane as those to which they have given rise in minds less disciplined and cultured. We have already remarked how inevitable is the tendency in persons of this monomaniacal mental character to develop their notions, and draw within their circle any morbid analogous absurdities. The published discourse of the Reverend Thomas Everest, Rector of Wickwar, preached in London, in aid of the Hahnemannic Hospital, presents us with an instance in point. This divine, who boasts of "some years of intimacy" with Hahnemann, conceives that he has discovered the doctrines of his friend in the Holy Scriptures. Here we can trace the operation of the associating faculty :—

"At the fall of man, sin entered into the soul, and disorder into the physical frame (with which that soul is connected); at the same moment, God sent his Son to repair the mischief, and He bade his ministers preach the Gospel and heal the sick; that is, cure the moral disorder and the physical disorder together; and for nineteen hundred years that precious wisdom has cried in the streets unheard."

There is therefore, according to both Morison and Everest, an original physical taint as well as a moral taint derived from the fall. In the command of our Saviour to his disciples—"Cleanse the leper"—Mr. Everest finds grounds for believing the leprosy of the New Testament and the psora of Hahnemann to be identical. He conceives, also, that this *corporeal* taint is also the source of sin; or, in his own words, "irreligion is the daughter of internal disorder." Now, as all internal disorders depend on psora, it follows that an anti-psoric homœopathic treatment is an excellent adjuvant to spiritual purgation. Mr. Everest therefore very logically (your monomaniacs are unflinching logicians) recommends that a continuous medicinal treatment, founded on these principles, be begun in childhood, with the hope thereby "to anticipate disorders, to restore harmony, to combat the internal *psoric*

tendencies, and to procure a patient hearing and kindly reception of spiritual ministrations." Here is the fundamental idea of Morison, but developed in a more theological manner, by an association with ideas already grafted in the mind of the reverend divine.

This religious element of homœopathy has assumed a more eccentric development than even this of Mr. Everest's. A French writer speaks of Hahnemann as "the new Evangelist," and "the most inspired of revealers." The "school" of Rio Janeiro, from whence this notion has arisen, is an excellent instance of the more developed forms of the Hahnemannic monomania. The founder of it adopted the idea of potentization, and invented machines for succussing or shaking remedies, and thereby increasing their medicinal virtues. It would be wearisome to the reader to specify the follies of this sect in this respect. This school also extended the religious branch of the delusion, and drew a parallel between Hahnemannism and Christianity. Prince Alphonso, heir apparent to the throne of Brazil, died in a few days after his birth, for want of homœopathic treatment. A European promulgator of the views of this school (author of "*Doctrine de l'Ecole de Rio*," &c.) maintained that for medicine to become, like other sciences, properly Christian, it was necessary that a victim should be offered up as an expiatory sacrifice, "to conquer the indifference of the vulgar." This expiatory victim "for the physical redemption of humanity" was this infant prince. "It seems," he concludes, "that it is only by an excess of evil that man can return good. In order that humanity should renounce the worship of false gods, nothing less than a DEICIDE (*sic in orig.*) was requisite. It is by a REGICIDE (*sic*) that allopathy behaved to mark its last hour."

We will follow this monomaniacal association of ideas a little further.

Out of the homœopathic hallucinations the *isopathia* arose. According to isopathy, all contagious diseases contain in their contagious matter the instrument of their cure. This was the notion of a German veterinary surgeon, named Lux,—arising, manifestly, from the Hahnemannic dogma. All contagious diseases were therefore recommended to be "potentized" into remedial agents—variolic matter for variola, the itch-virus, or "*psorine*," for the itch, &c. This latter became a great remedy for all the so-called psoric diseases (nine-tenths of all diseases whatever). Things horribly filthy or ludicrously nasty, were, on the isopathic principle, gravely recommended to be "potentized" and administered. A bug in the thirtieth dilution (the decillionth), cured the inflammation arising from a bug-bite. But we will not record the filthinesses of these monomaniacs; suffice it to say, that *no animal product whatever* is too abominable to be "potentized" and administered as an infallible remedy!

Amongst the more curious divergencies of the homœopathic ideas is that towards mesmerism, the point of junction of the two being in the monomaniacal idea of the "Od force." We have already seen that, according to Hahnemann, certain occult forces can be developed in matter by trituration and succussion; well, a Mr. Rutter invented a "magnetoscope," whereby magnetic currents could be detected passing through the human body. The instrument was analogous to the "odometer" of the late Mr. Mayo,—the same in principle, a little more complex and scientific-looking in construction. Great was the astonishment and delight of Dr. Quin and other leading homœopaths to find that when their globular nonentities were tried by it, by being placed in the hand of the experimenter, they proved to have a most powerful magnetic influence—not less powerful, indeed, than Reichenbach's favourite "rock-crystal"! Mr. Rutter was almost worshipped, as may be gathered from the following extract from a lecture on these experiments by Dr. Quin:—

"I feel confident that you will agree with me, that science has made a gigantic stride by the philosophical instrument and important discovery of that gentleman, and that homœopathic practitioners especially are greatly indebted to him for having proved the physical action of our remedies, in infinitesimal quantities upon the human body. . . . The only reason for sorrow is, that our revered master, Hahnemann, is not alive to witness this triumphant proof of his own great discoveries," &c.

Dr. Madden soon showed the true nature of this delusion. He found that any *anticipated* motion of the magnetoscope took place invariably; in short, that the movements depended upon the *unconscious* but suggested muscular movements of the operator; and so the bubble burst.

The study of the occult in modern times is no more profound than in the more ancient. The potentization of medicinal agents is little different from the alchemical notions of an elixir vitæ; delusions as to the divining rod, and the various modifications of the "Od force," may be compared with the mineralogical researches of the alchemical philosophers. Even the metallic rings and other electro-biologic and mesmeric agents have their parallels in ancient times. The *Æs Cyprianum* of Alexander Trallianus is the exact analogue of nickel in the hands of a too-celebrated English mesmerist. The subjoined remedy for the colic is as likely to be beneficial as a magnetic ring, or a "potentized" particle of matter:—

"Annulum ferreum accipito, ac in circulum ipsius octangulum efficito, atque ita in octangulum inscribito *φευγε, φευγε ιου χολη η κοροδαλος εζητει*; hoc est, Fuge, fuge, heu! bilis alaunda quærebat subjectam autem

figuratam in annuli caput scribito \mathfrak{N} . Hujus, magnam habui experientiam."

An iron ring (made, we ought to add, on the 21st day of the moon) is the "base" in the above prescription. "Take an iron ring, make in its circle an octangle, and thus write within that octangle: 'Fly, fly, alas! bile the lark excites.' But inscribe the subjoined figure on the head of the ring: \mathfrak{N} . I have had great experience of this."

Shade of Hahnemann! thy predecessor, Alexander, was thy equal not only in "proving," for he also rivalled the filthiest of thy isopathie followers in the nastiness of his remedies.

In the preceding illustrations we have confined our attention to occult force, used for *good* ends, or, at least, for things that may be honestly desired—as health, riches, and the like. Man has, however, been involved, from time to time, in delusions as to occult *EVIL* powers. These are, indeed, much more frequently the subject of monomaniacal delusions in the insane than of popular aberrations. The terrible times of witch-finding and witch-killing are full of horrifying proofs to what an extent delusions like these may prevail. The ideas as to the nature of these *EVIL* forces differ according to the *associated* ideas—*i. e.*, the educational prejudices and pre-conceived ideas of their victims. Amongst the Slavonic peoples, the horrible superstition termed *vampirism* seems to have been eurrent, like witchcraft amongst the Celtic and Teutonic. So late as the beginning of the last century, it was epidemic in Bohemia, Moravia, Silesia, Poland, Hungary, and Wallachia: there was hardly a village that was not said to be haunted by one of those blood-sucking demons termed vampires. Our Gothie and Teutonic ancestors believed in some similar delusive appearance, and evil agents, termed Stryga, or Stryx. We shall see shortly that a being, with bat-like wings, haunted M. Cahagnet's midnight hours; vampyrism, nevertheless, is not (strange to say) amongst his marvels, although we have a conviction it has not escaped his bibliomaniacal researches into "the black art." It is not uncommon, since magnetism and electricity have been made popular sciences, to meet with monomaniacs who have a fixed idea that they are secretly galvanized or electrified by a distant and inveterate foe. Even yet the monomaniacal notion of active sorcery and witchcraft may be met with in practice, and a poverty-stricken decrepit woman becomes an object for the hate and dread of the miserable hypochondriac. The author of "*Magie Magnétique*" expresses his entire belief in the various tales of sorcery with which mediæval literature abounds—*e.g.*, he quotes, approvingly, the story from Boëthius' "*Annals of Scotland*" as to a certain King Duffus (?) of that country, who was bewitched by certain sorcerers by means of a waxen image of him, which they *roasted (sic)* before a little fire; and

who was only restored to health by the discovery and combustion of the malefactors. He quotes, also, a story of seventy sorcerers who were put to death, in 1670, in Sweden, who (amongst other crimes) destroyed those that displeased them by striking the air with a wooden knife. Some hundreds, indeed, of such sorcerers were burnt in that country, without any apparent diminution of their numbers. But M. Cahagnet only mentions these facts historically; he relies upon very recent instances for his proofs, of which the following is an example. It is taken from an author* whom he describes as one who appears to him to be a very learned man, full of good faith, and above all suspicion of interested motives or of weakness of mind:—

“It was in the month of March that three itinerant magnetiques, paid by I know not whom, began in the darkness, and at a distance, to magnetize me, and to develop phenomena which I could not explain, and which occupied much my attention. I heard persons abusing me, but I could not distinguish them; I had headaches, was restless, the nervous system began to be in an abnormally irritable state, &c. Subsequently, tormented by the voices which menaced and insulted me, *especially during the night*, and believing that the family Lavaud betrayed me, for their voices were imitated for the purpose of deceiving me, I left the residence where I had been loaded with kindness. . . . Some time after this change of abode, the three wretches who had rendered me so unhappy, and who had calculated beforehand the advantage of isolating me, took all possible means for bringing me wholly under their influence, and succeeded towards the end of May. At that time, one evening, at the moment between waking and sleeping, when my will and powers of resistance had left me for a moment, I was magnetized in floods, if I may so express myself; and in the morning I was wholly at the mercy of my persecutors,—or, in other words, three strangers, whom I had never seen, did, unknown to me, and in spite of me, so take possession of both my moral and corporeal freedom, that they saw by my eyes, heard by my ears, touched by my hands, . . . &c. I pass over in silence” (continues M. Cahagnet) “the thousand and one miseries this gentleman suffered; he laid an information before the tribunals, and caused a petition to be presented to the chamber of deputies, through M. Croissant, with the view of directing the attention of the government to the occult machinations of magnetism. That petition was not taken into consideration. To support the statement as to his being bewitched, he quoted the case observed by Dr. Recamier, member of the Royal Academy of Medicine of Paris. This recent fact I subjoin.”

The case there subjoined by M. Cahagnet is that of a peasant who at the same hour every night, heard a deafening noise, as of a caldron

* Observations de Magnétisme Occulte, par Emile Roy, docteur-médecin, ancien chirurgien-major, p. 1840.

or iron pot struck very powerfully; it prevented him sleeping, and he thought that he had either an affection of the brain, or some disease of the organ of hearing. He therefore consulted Recamier, who, after making the necessary inquiries, ascertained that a blacksmith, who lived in a village at some distance from the patient, had a spite against him for some trifling offence or other, and with a view to annoy him, struck an iron pot every night at the same hour; and although no one else, not under the influence of the smith, could hear the noise, the unhappy peasant heard it as clearly as if it were in his room. Recamier took the necessary steps to put a stop to the smith's spiteful hammering, by frightening him with consequences, and the magnetized was from that time let alone.

Amongst other similar stories related by M. Cahagnet, is one he quotes from the *Presse*, from which we learn that Pascal had a confirmed belief in the power of good and bad spirits, for the following written amulet was found in a fold of his doublet, wrapped up in parchment:—

“L'an de grâce 1655.

“Lundi, 29 Novembre, jour de Saint Clément, pape et martyr, et autres du martyrologe.

“Veille de Saint Chrisogone, martyr, et autres. Depuis environ deux heures et demie du soir, jusqu'à environ minuit et demi.

“Fen.

“Dieu d'Abraham, Dieu d'Isaac, Dieu de Jacob.

“Non des philosophes et des savants.

“Certitude, certitude, sentiment, joie, paix.

“Oubli du monde, et de tout, hormis Dieu.

“Joie, joie, joie, pleurs de joie.”

This amulet of Pascal is described by M. Lélut, member of the Institute, and principal physician to the Asylum Salpêtrière. Pascal (we are told) was bewitched before he was a year old, by an old sorcerer who received alms at his father's gate, and who confessed to having cast a spell over the child. The old fellow sacrificed a cat to the devil to break the spell, but without success; he then made a poultice of various herbs, which he had got a little girl, aged seven years, to gather, and applied it to the abdomen; the child fell into a lethargy, but returned to life at midnight, as the sorcerer had predicted.

The true character of M. Cahagnet's mind—namely, reasoning mania—may be gathered easily from the details of a successful *experiment in incantation* made by him. As it is calculated to throw light, not only upon the state of mind of this mystical lunatic, but also upon these maniacal delusions generally, we subjoin it. M. Cahagnet introduces his story by an explanation of the way he was led to make his experiments. He says—

"M. Renard, of whom I have spoken to thee, is my master in all these studies. He is possessor of an excellent library, as I have frequently observed, in which he often left me to rummage out and read at my leisure all the conjuring books therein. When I had got thoroughly crammed with their gibberish, I remarked to M. Renard that it was of little use to read only these old volumes, and stop there. I wanted specially to know whether these magicians, sorcerers, cabalists, astrologers, &c., had said anything true, or were only purblind. Would you, on some fine midnight, make a regular conjury with me in the midst of the forest of Rambouillet, in the most detestable and diabolical locality possible? I should like to see the devil face to face, and have a pull at his beard, &c. My friend frowned, compressed his lips, and assumed the most picturesque figure of a sorcerer I had ever seen. I thought for a moment that he was the devil himself. He gave me no answer. 'Oh! indeed!' I said, 'are you afraid—you the terror of the country, before whom the children cross themselves, and the women tremble?' 'Yes,' my friend replied, in a tone which made me burst out laughing. 'Do not laugh, Alphonso,' M. Renard replied, 'and never you do that which you have proposed that we two do. I have made the trial once, and I never will repeat it.' 'What have you seen, then?' I replied. 'That which I not wish to see,' my friend answered. 'Let us cease this conversation, or change the subject. Only you remember my advice, and profit by it,' were the last words of M. Renard."

Now, M. Alphonso Cahagnet's curiosity was only whetted by this mysterious counsel. He "had never known what fear was, and he had so often escaped certain death that he had come to consider himself invincible." He considered the matter well, and asked himself what need was there to go into the depth of a forest and make a diabolical incantation when according to the Christians (*sic*) we had always near to us a good angel and a devil, and, according to the clairvoyants, a good and bad director? Why not call these directors up? This conclusion appeared sound; so deciding that night was the best time, he wrote on a piece of paper, and signed the following exorcism:—

"Au nom de Dieu tout-puissant, ton créateur et le mien, je te prie, ange commis à ma garde, de m'apparaître cette nuit, afin de me prouver la réalité de ton existence."

Or in other words he summoned his good angel in the name of God, their common Creator, to appear to him, and prove thereby his existence. With this paper under his ear, and nothing doubting as to the result, M. Cahagnet retired to repose. The result we will give in his own words:—

"It was in February 1841 that I tried this kind of communication. The first night I neither saw nor felt anything extraordinary; the second offered to me a phenomenon which astonished me enough not

to desire to experience it again. I had only been in bed a few minutes. I was not asleep; at least I was certain I was not, when I felt my left arm gently drawn out of bed; then a stronger force drew upon my leg, so that my body followed my two limbs, and I fell upon the floor. I immediately exclaimed, 'Oh, my God! what is it that this means?' I had scarcely uttered than I replaced myself in bed, with the complete consciousness that all that had passed was only the effect of the imagination. I began to reflect upon what I had done, and upon the consequences which might follow upon my exorcism. I did not like to withdraw from the attempt, so I continued to place my little bit of paper under my ear every night. I was quiet for some days, and I already doubted the result of my experiment, when I one night begged a good aunt of mine, who had been dead some years, to appear to me instead of my guide. This aunt loved me much when on earth; she had tried by every possible means to induce me to observe what she termed my *religious duties* without success. If I had thought I should meet in the churches no souls but those as pure and angelic as her own I would have gone every day to solace my wounded spirit within their kindly sphere, but the intolerance of the priests had made me an atheist. I conjured, then, this noble creature to appear to me, if she were able to do so. I was astonished to be awoke on the same night by the sound of a very powerful bell, the clapper of which struck three times, and three strokes each time. Hardly fully awake, I saw before me the son of my aunt, my cousin-german, who had died after her. I entered into conversation with him, and was really quite astonished to hear him speak to me of the spiritual world, of the goodness of God, and of the need of pure religion. When this cousin was on earth he thought as I did; indeed, I think I owed a little of my scepticism to him. I replied that I was better disposed towards these matters than when he was on earth, seeing that I read books which had enlightened me, and that at that moment I was endeavouring to enter into communication with spirits so as to assure myself of their existence and of a future life. I added that I had called my aunt for this identical purpose. I had not finished the last sentence when I saw that good aunt standing at the foot of my bed, in an attitude the most majestic possible, stretching one arm toward heaven, pointing me to it with her finger, and saying to me in a voice inexpressibly tender and touching:—

“‘Alas! Alphonso, do you still doubt the power of God?’

“Overwhelmed by these words, I endeavoured to revive my scepticism by a few unconnected expressions. All disappeared. I lighted a candle to see what o'clock it was. It had just struck four. Some days now elapsed without anything happening. Another night I heard the sound of that same bell striking the same number of times. I opened my eyes, and I saw a human head hover over my bed, the most hideous imaginable; it was supported by two large bat wings; its eyes were of fire, and seemed to pierce me to the heart. I was so enraged to see such a monstrous creature that I repelled it with voice and gesture, sitting up in bed the better to defend myself from contact

with it. Not being able to succeed, I invoked my good angel and my aunt. Hardly had I expressed the wish than all disappeared. On the night following the same noise again awoke me, and I saw kneeling before my bed a woman whose long black hair concealed her face, but whose wicked intentions I knew, and which she avowed to me without my knowing the motive. I was obliged to have recourse to the same invocation to rid myself of this infernal woman. I began to write of these visions, and noted the hour at which each occurred. Similar noises and visions, more or less fantastic, continued for some months. One night I had hardly laid my head on my pillow when I felt it to move so as to raise me up at least six inches. I thought this was in consequence of the breathing of a strange head beneath mine. I asked (I know not why), 'Is it thee, my good director, who art here?' 'YES, YES, YES,' a voice answered at three distinct intervals, speaking from just below my pillow. I was terrified by the answer, and asked no more that night.

"The next day the noise changed; it was not the sound of a bell which awoke me, but the same blows struck in the same manner with rods, which I thought of iron from the clear sound they made; the same movement was felt under my head; I again asked if it was my director, and it made me the same answer in the same way. Less afraid than the night before, I said to him, 'If thou be my good angel, thou hast a name; if thou comest to me with a good intent, it is right that I know how to address thee when I have need of thee—tell me then thy name. The word AGOOR was pronounced thrice with such a prolonged detonation of sulphur that I beseeched God never to let me hear that name again.'

In this way M. Cahagnet goes on describing his nocturnal spectral illusions. For three years, indeed, he tells us he heard voices of every kind; saw all sorts of visions; felt various sensations; and especially had numerous previsions. He could not get rid of them, and obtained only a temporary relief by calling upon God for help. He applied to his master, M. Renard; he read medical works on various diseases, but in vain. The first clairvoyante, however, whom he consulted told him that he was under a spell. This self-inflicted suffering, so madly misunderstood, had an evil effect on others as well as on himself. With great naïveté he further relates how an inhabitant of Troyes, a reader of his *Arcana of the Future Life*, came express to Paris to state his position. He and two others having read the "Occult Philosophy" of Agrippa, determined to adopt the methods of incantation detailed in that work. They made the requisite arrangements, reached the place appointed, traced the circle, and commenced the ceremony, and were forthwith assailed by a shower of stones, groans, and by hisses, doubtless by hidden spectators. Nor was this all. One of the three had lost 60,000 francs by his foolishness, and was reduced to poverty; another lost an office under government which he held; and a third

so mismanaged his affairs that he was sent to prison. These sufferings were all, however, simply proofs of their truth and sincerity! Compacts with spirits are as fully established (M. Cahagnet remarks) as anything in the world.

Those who have read that sad chapter in European history which unfolds the treatment of WITCHES and WARLOCKS, cannot fail to recognise in this M. Cahagnet one of those men who would have victimized hundreds by his follies, and would himself have finally been the victim of the superstition, ignorance, and credulity of society. Reading these details, so deliberately and calmly given, one can hardly believe that it is now the middle of the nineteenth century. And as formerly the deluded creatures named their familiar spirits Pyewacket, Vinegar Tom, Grizell Greedygut, Swain, &c., so do these visionaries name theirs. One Colonel Roger is quoted, who formed a cabalistic club of nine members, whose object was the practice of the black art, and who had a certain spirit, termed Mikenas, at their call. Mikenas would fetch and carry like an errand-boy.

“*Prospero.* What, Ariel; my industrious servant Ariel?
Ariel. What would my potent master? Here I am.”

Mercurial water is wanted, Mikenas is invoked, and the flask is seen to place itself of its own accord on the window-sill. The greater number of the members took snuff, and complaining of the bad quality of what they had, desired “*narquitoche*,” a *recherche* American snuff not sold in France. A certain *lucide*, already known in London, we believe, to be an impostor, advised that money should be put down for Mikenas to get the much desired snuff. No sooner said than done. Mikenas was invoked—away went the money. Hey, presto! in a minute came the snuff! The following story of the colonel’s of their cabalistic doings is too curious to be omitted:—

“Know that the members of this club have, in their cabalistic articles of faith, come to the conclusion that it is possible for elementary [spiritual] beings to be transformed into material beings, as thou may read in a book entitled, ‘*Le Comte de Cabalis*,’ &c. I have already referred to this subject in our conversation on cabalistic mirrors, when explaining that the cabalists admit that the elements are only composed of such beings as ourselves, but without our immortality, which they do not possess and cannot, except by being united to the sons of heaven, who are our *seigneuries*. The chief of the colonel’s club (following the advice of the clairvoyante who enlightened them) had concluded a spiritual marriage with a sylph, a spirit of the air; but to the end that this spirit should be visible and palpable to his material senses it was necessary, naturally, that it should be materialized, and this could only be effected by the spirit absorbing those of our material substances the most adapted to its

nature. This is what happened for six months. Every day this invisible spirit placed itself at table before M. Pic——, and devoured all the food which it had demanded from their clairvoyante, and which were expressly prepared for it. There only wanted a few months' more of preparation for this spirit to be rendered visible to the eyes of her *fiancé*. . . . But the revolution of July came to dash this sweet hope by carrying off M. Pic——, who died some time after, and himself joined his *fiancée* in the spiritual world. What is certain in this account is this, that the material food placed every day at each meal on the plate of this spirit disappeared every time in the presence of those whom monsieur invited to dine with him, and this continued for six months. I have this statement from two eye-witnesses, Colonel Roger and M. Bodes, an octogenarian now residing in a *maison de vieillards*, rue des Recollets, in Paris."

The imaginary "G." of the dialogue exclaims, on hearing this recital, "Oh, my good friend, where are you leading me?"—and the answer boldly is, "To the search after truth"!

"O, Setebos, these be brave spirits, indeed!"

We cannot omit stating that M. Cahagnet claims the power of *charming away the clouds*,—relating numerous examples of his success, indeed, and giving names of witnesses and dates. We will quote an instance or two, for the delusion is novel, and is a useful illustration of pathological psychology. We subjoin the history of his first experiment:—

"I had just completed the perusal of M. Ricard's 'Cours de Magnétisme,' in which that author appears much disposed to admit the magnetic influence of man on the atmosphere. I was interested by this idea, and on several occasions I made experiments, which appeared to me to be tolerably successful. I communicated these attempts to M. Renard, who lives in the woods six hours out of twelve every day. This studious magnetist also made the same experiments, with the same success. He believed it was not possible to doubt this magnetic power of man over the atmosphere; but the question is apparently so ridiculous and nonsensical, as thou hast remarked, that we abandoned this sort of experiments. They were of this kind: when I felt a VERY ARDENT DESIRE to experiment, I went into a little garden that I have; I there collected myself for a moment, looking at the sky and at the clouds with which it was more or less covered. My imagination (or my *will*, if you like) was then excited, and I stretched forth my hands towards some cloud which I wished to stop in its course. After some minutes of this action and of this conviction, it seemed to me that the cloud took the direction which I had imposed upon it. I say, *it seemed*, because I DARE NOT SAY MORE. It was not once only, but MANY TIMES. I had not the feeling that the cloud was so distant as it really was. I likewise thought it to be of a *compact* nature, capable of resisting any pressure, and I then used a certain amount of force to push it, just as I would with a heavy weight."

M. Cahagnet also made the rain to cease, and the sky to clear up. The hyperæsthetic sensation described in the following (marked by us in italics) is very significant and characteristic, pathologically. Something almost identical with it has been described by M. Cahagnet before:—

“One day, when the sky was overcast, and a very small but heavy rain was falling, I went into my garden, animated with the conviction that I was about to disperse the clouds and procure fine weather. I commenced proceedings, and *passed into such a state that it appeared to me as if the bone of my head was raised some inches*. I was not long in perceiving that a beautiful blue crown formed above me, which went on gently enlarging until, in about an hour, the rain ceased and the sky was magnificent. Was it an hallucination? It might be; but on entering the house I got strangers to touch my clothes,” &c. &c.

The clothes were *dry*, and therefore, &c. Subsequently, M. Cahagnet made some experiments equally brilliant and more satisfactory, under various circumstances, and in the presence of different witnesses—namely, M. Lecoeq, of Argenteuil, watchmaker; M. Chevillard Médar, farmer; M. Gérard, cooper; MM. Lejeune, Ravet, Emmanuel, &c. Médar and Gérard call upon him to witness his exploits:—

“I said to Médar, I don’t feel exactly in a condition for trying an experiment of the kind just now, especially on such large clouds; however, if you will both help me, we will try. Oh, said they, we will willingly. Then, said I, I attack the head of that one which is upon the other and dissolve it away;—and I stave in its belly, said Médar, with that sort of faith in magnetic facts which is daily exhibited. M. Gérard added, ‘and I will take the tail.’ We all three set to work. Seeing us thus engaged, we might have been compared with the three Horatii, setting aside the object in view. In ten minutes our cloud had gone to rejoin its companions in that vast ethereal laboratory which contains us, and was no longer visible to our eyes. M. Gérard said, It is true the cloud is gone, but has not the cloud below it absorbed it? Possibly, I answered; let us therefore set to work to open the belly of that one, and recover our cloud—what say you? We will do it if it be possible, they answered, but it is sharp work. Let us try, then, said I; and at the same moment we went at the giant with such force and energy, that it disappeared, like its companions, in about ten minutes. Imagine the enthusiasm and astonishment of my visitors, who from that day have continued to make experiments more and more demonstrative and conclusive.”

Here end our illustrations. Well may it be said, by the men and women who pass their lives in the pursuit of delusive objects like those we have discussed—

——“we are such stuff
As dreams are made of.”

We now propose to draw the moral deducible from these follies and crimes. The whole history of these varied delusions is a most pregnant chapter in the history of human nature. It unfolds to the thoughtful psychologist wonderful and important glimpses into the more hidden workings of the mind. What strange ground for belief!—what irrepressible convictions!—what trusting faith!—what horrible martyrdoms!—what cowardly fears!—what constant fortitude! And all based upon nothing more substantial than the fantasies of the imagination, or the knaveries of rogues! It is now well known that if the attention be strongly directed to any object by individuals predisposed to cerebral disorder, a condition of the cerebrum is excited closely allied to notional insanity, or at least to that state which gives rise to various disorders of the nervous system. If the directing cause be something external to the mind, the phenomena induced come under the categories of the mesmeric, biological, &c., and frequently give rise to the erroneous deduction that occult material forces present in the external directing agent are the cause of the phenomena themselves. The attention may, however, be excited to special action by the *internal* operations of the mind itself. When this happens, the representative faculty acts directly upon the cerebrum, induces corresponding change therein and these return, as it were, to the mind, in the form of spectral sensations, perceptions, imaginations, and associations of ideas,—not, however, easily recognised as morbid, when the mind is enfeebled, or the reasoning powers imperfectly developed. It is this morbid mental and cerebral condition which is most usually present in enthusiasts and visionaries, in whom the attention has been strongly fixed on a special object of thought or perception, in consequence of a predisposing love of the marvellous, or from the compelling force of the circumstances in which the individuals are placed.

In considering these forms of cerebral disorder, we have to examine carefully the order of the phenomena, with a view to a correct idea of their origin, nature, and development. In the first place, it is a noticeable general fact that the subjects of all these varied changes in the nervous system are persons already predisposed to the influence of nervine agents. There is either great natural sensibility of that system, or a hereditary tendency to morbid action, or an enfeebled condition of the blood, or (as has not unfrequently happened) medicinal agents have been administered, either by inhalation or potion, with the express intention of inducing this susceptibility; or extreme mental labour has been endured, or a special emotional excitement has been caused.

When the attention of a person thus predisposed is specially roused and directed, the mind receives at the same time a suggestion as to the

event likely to result; or, in other words, an *anticipation* is excited. The strenuous act of attention is of itself a powerful modifying agent, and largely exalts the predisposition to irregular nervous action which may already exist, or develops it where it does not. It is therefore a fundamental part of the morbid process that these two acts, *attention* and *anticipation*, be excited. The phenomena will vary almost infinitely, according as they are special or general in their character; that is to say, according as some suggestion is made or particular idea is excited *ab externo*, or according as the direction which the morbid process will take is left to the individual's own mental workings. They are as varied in the former case as the external circumstances from which they originate; in the latter, as the mental constitution, habits of thought, and preconceived ideas upon which they are based.

Amongst the *natural* examples of these monomanias (for they exist as such, and are to be found in all large asylums), the hypochondriacal takes a prominent position. In these, the morbid influence of the attention on the bodily organs has been fully recognised since Sir Henry Holland called special attention to the subject, in the first edition of his "Medical Notes and Reflections." It is generally agreed now by the leading neurologists, that the anticipatory acts of attention which the hypochondriacal patient is constantly directing towards some viscus, is a cause of disease in the viscus involved—not functional only, but structural disease—altering the sensations usually experienced, modifying the mode of action, and finally inducing change in the tissues themselves.

Now, in hypochondriasis, the *anticipation* is of *evil*; the morbid mental state is the *predisposing* source of the suggestion, and the perusal of medical books, or other similar application of the mind, is the *exciting* cause of the *special* ideas upon or from which the mind acts. But there may be anticipation of corporeal *good*, as well as of evil. In this case, the order of the phenomena is still the same—*i. e.*, there is an alteration in the ordinary sensations, a change in the mode of action, and an alteration of structure. To this class of anticipations belong those developed by homœopathy, mesmerism, confidence in treatment, or faith in spiritual influences. These, it is true, result from other sources than those seen in hypochondriasis, but very often indeed the subjects of them are either hypochondriacal or hysterical, or have a predisposition to insanity, or other sensorial disease of the nervous system. To this large group of induced *corporeal* changes belong also the *evil* results consequent upon delusive apprehensions as to the influence of witchcraft, the "evil eye," diabolical agencies, and the like. All morbid acts of attention from these sources, and the morbid anticipations which accompany those acts, may—like those of

the hypochondriacal—be followed by both structural and functional changes in the viscera and in the sensations ordinarily connected with them. It is doubtless these results which have so firmly fixed the popular belief in the capabilities for evil of the performers in the black art, and in the power of miraculous gifts of healing professed by members of almost every religious sect in every age, and in every clime. It cannot be denied that persons who profess the power of inflicting injury may become proper objects of punishment if they maliciously and deliberately make the subjects of their malice believe that they are putting those powers into practice, and thereby induce bodily and mental disorder. Indeed, it appears to us that thus to cheat a simple-minded man out of his health and happiness is more criminal than to swindle him out of his property. There are other instances of analogous criminality that might be adduced—*e. g.*, the nefarious methods by which certain advertising quacks act on the mind of their victims, and induce morbid acts of attention and anticipations as to corporeal evil, of the most fearful character.

Perhaps *convulsive movements* of every kind might be properly placed under the last head, when induced by morbidly excited attention. They differ in having a purely cerebral seat, although the phenomena be manifested outwardly. Every form of catalepsy, chorea, and epilepsy are within this group. The monomaniacal societies to which the *dancing* mania of the fourteenth century gave origin may be classed with those of cerebral and intellectual origin, and the disease itself was very similar to some modern affectations not connected (as that was) with religious ideas. Of what we can have no doubt we will, however, more especially speak—namely, those morbid conditions of the sensorial and hemispherical ganglion which a strongly directed attention induces. There are two principal divisions—namely, those in which the mind originates spontaneously the strained attention and the *suggestions* arise in the ordinary way; and those in which the attention is excited artificially, and the suggestions are derived immediately from without. To the former belong all visionaries,*—to the latter, the mesmerized clairvoyantes, the electro-biologized or hypnotized, &c. A third division arises out of a combination of these two sources of morbid action, as in the “evil eye,” witchcraft, table-moving, and spirit-rapping. The spectral phenomena which constitute the bases of these forms of mental aberration are by far the most commonly visual, then (in the order of frequency) auditory, muscular,

* Gibbon in his History describes in a few pithy words the process as it was manifested in Peter the Hermit. “Whatever he wished,” says Gibbon, “that he believed; whatever he believed, that he saw in dreams and revelations.”—Decline and Fall, lviii.

taetile, and olfactory. The points of interest they present are too numerous for consideration here; they also demand, on account of their vast importance, a closer and more critical analysis than is possible at present. It is hardly conceivable to what an extent they have influenced man's conduct through the religious dogmas and political changes that have been based upon them. History is rife with illustrations of their wide-spread influence. In the middle ages, and even later, it was not possible for the wisest men to escape from their influence. The epidemical power of witchcraft may be mentioned as an instance. In numerous instances the accused confessed to circumstances which could only have arisen (if any faith can be placed in common sense) in a morbidly excited state of the system, the notions being precisely those with which the popular mind was imbued from the cradle. We find the following, in Sir W. Scott's "Letters on Demonology and Witchcraft," as to the confessions of a reputed Scotch witch, named Isabel Gouldie:—

"She had been, she said, in the Dounie Hills, and got meal there from the Queen of Fairies, more than she could eat. She added that the queen is bravely clothed in white linen, and in white and brown cloth; that the King of Fairy is a brave man; and there were elf-bulls roaring and skirling at the entrance of their palace, which frightened her much."

And a great deal more of the same kind.

The *auditory* illusions in these cases have had less attention bestowed upon them than the visual; they are less common, because the sense of hearing has not so extensive relations as the sense of vision, and because the attention is less frequently directed to auditory perceptions, and the *suggestions* which develop them in morbid association are not so numerous. It is in "spirit-rapping" that we have the best modern illustration, although all enthusiasts and visionaries who have received spiritual messages, or held a supposed conversational intercourse with spirits, the Deity, &c., belong to the group. It would, we believe, be altogether contrary to the fact to say that those who profess to hear the "spirit-raps" are deceived by others, or state what they know to be false. They have the strongest possible conviction that the sounds which they hear are genuine, just as in the analogous instance of the insane, and they cannot comprehend by what machinery such distinctly audible sounds can be produced except by agents external to themselves. This conviction is more deeply rooted, when, as it often happens, several persons, being subjected at the same moment to the influence of a common suggestion, and of a morbidly excited attention, hear the same illusory sounds. The following instance shows, however, how these illusions may be induced and removed. A lady being

on a visit to a family in which experiments at spirit-rapping were made, became herself a "medium"—that is to say, whenever she touched a door, a table, or a chair, she heard the raps. This was amusing enough for a short time, but on her return home the same circumstance occurred to such an extent that she could touch no article of furniture without hearing these sounds. She wrote to her friends to explain the awkward position she was in, and to beg of them to "exorcise" the spirit—a duty they found to be rather puzzling. However, they wrote back to say that they had taken the necessary steps, and that from the time she received their letter she might confidently rely upon not hearing the spirit any more; and actually from that moment the raps were not heard. We had this history from one of the persons engaged in the transaction, and who has taken great interest in all these phenomena. Of course the reader acquainted with hypnotic or "electro-biological" phenomena will readily recognise the true nature of the "possession" and exorcism. Table-moving is one of the same class, but the *suggestions* direct the muscular system instead of the representative faculty.

Now, amongst the very important moral questions which arise out of the consideration of these phenomena, there is one of transcendent importance—that is, the bearing they have upon the nature and value of *evidence* or *testimony*. There is hardly any more certain conclusion to be drawn from the vast variety of experiments which the psychologist has made to his hands by the numerous classes of persons whose vagaries we have glanced over than this—that sensorial perceptions, ideas, associations of ideas, and general propositions utterly false and erroneous, may be induced by suitable arrangements and manipulations, not only in individuals, but in *large numbers of persons at the same time*, and yet appear to them as being indubitably real and incontrovertibly true. Even when the phenomena are palpably impossible as realities, and the propositions are evidently absurd (as we see in homœopathy, mesmerism, &c.), it is difficult to rebut the evidence thus adduced; but in those cases in which they are probable, although the alleged circumstances did not occur, how can it be *proved* that they are illusions if in themselves not susceptible of re-examination—such as simple spectral illusions and the like? The importance of this question is not diminished when we remember that a designing knave might, by an artful combination of influences, so hypnotize, or otherwise influence the minds of a given number of persons as to make them powerful witnesses in support of a delusion. That such practices constituted part of the system of the sorcerers in the middle and dark ages is, we think, certain; nor are we without well-grounded suspicions that even now, in this the nineteenth century, the nervous system is

thus acted upon for the purpose of perpetuating deliberate well-planned frauds. In the "Magie Magnétique" of M. Cahagnet there are several examples of this kind.

What is the remedy for these serious evils? Mr. Faraday has attributed them to defective education in the people, and would improve it in the direction of the Baconian philosophy; but the cultivators of science are themselves the victims of these delusions. As examples, we need go no further than Von Reichenbach and his English translator, the Professor of Chemistry in the University of Edinburgh. The remedy is not easy. The practical psychologist will not, however, lose so favourable an opportunity for the study of the human mind in its aberrations; and the psychiatrist may gather something useful from a careful inquiry into these monomaniacal societies and their literature. The phenomena of which they treat are so closely allied to the hallucinations and notions of the insane, whether we consider their essential nature, their origin, their progressive development, and their results, that for practical purposes they may be considered to be identical. The main difference is in the etiology; in the insane, in the majority of cases, the cause is material rather than mental; in the popular manias, it is rather mental than material.

ART. II.—ON PARALYSIS AND DISEASES OF THE BRAIN.*

WE have always considered the record of clinical observations as the best mode of imparting practical instruction, and we wish it was more frequently adopted, in lieu of the elaborate treatise. It is true that the clinical lecture is open to the charge of *tautology*; but even the repetition of important points may strengthen rather than weaken the interest of the subject. Remarks and notes made at the bed-side are indeed specimens of the natural history of disease freshly gathered, and not a mere *hortus siccus* of pathology, concocted from the stores of a well-stocked library. In the faculty of elucidating the salient points of a case, and forming deductions therefrom, we know few superior to the author of this work. His *truthfulness* is not, perhaps, the least merit of Dr. Todd,—he acknowledges having occasionally fallen into premature conclusions. This is the track of true philosophy, and if any one can *afford* to confess occasional fallibility in our most intricate and multiform science, it is this eminent physician. Indeed, no one knows better than himself the value of these confessions

* Clinical Lectures on Paralysis, Disease of the Brain, and other Affections of the Nervous System. By Robert Bentley Todd, M.D., F.R.S., Physician to King's College. 8vo. London: John Churchill, Princes-street, Soho. 1854.

to the student, feeling that we often learn more from the *negative* points (so to write) of pathology than from the proudest recital of our successes. In the words of the author:—"The successful cases speak for themselves, the failures we would fain throw a veil over; but, be assured, in so doing we benefit neither science nor ourselves."

Dr. Todd in the early part of his volume refers to the distinction between the paralysis of *sensation* and *motion*, the former being the most amenable to remedial treatment, and then observes that paralysis is not to be deemed a *disease*, but a *symptom*; the secondary, or even ternary result of remote disease. The author refers at length to the causes of paralysis,—those conditions which interfere with the propagation or transmission of nerve influence or force, a morbid state of the nervous centres or their trunks, blood poisons, inflammation, atrophy, hardening or softening, hyperæmia, anæmia, concussion, compression, or division of nerve. The pathological anatomy of the centres of volition is so important a preface to these discussions, that we will quote the author's remarks on this intricate point:—

"What are the causes which may give rise to paralysis? These are, either an affection of the nerve or nerves, whose power is destroyed, in some part of their course, or a morbid state of the centre in which the nerve or nerves are implanted, or with which they may be less directly connected. The nervous trunks themselves may be impaired in their nutrition, the centre being healthy, or they may have suffered some mechanical injury from violence or pressure; thus either they become imperfect conductors of the nervous force, or they are rendered altogether incapable of propagating it; or some portion of the centre of volition is the seat of a morbid process, whereby the influence of the will over certain parts is suspended, and thus the nerves of those parts receive no impulse at all from that centre, whether mental or physical; and although perfectly healthy in themselves, are incapable of taking part in voluntary acts.

"Whatever interferes materially with the conducting-power of nerve-fibre, or the generating power of nerve-vesicles (grey matter), will constitute a paralyzing lesion.

"I would say that the centre of volition is of very great extent: it reaches from the corpora striata in the brain down the entire length of the anterior horns of the grey matter of the spinal cord, and includes the locus niger in the crus cerebri, and much of the vesicular matter of the mesocephale and of the medulla oblongata. Disease of any part of this centre is capable of producing paralysis; but as the intra-cranial portion of it exercises the greatest and most extended influence in the production of voluntary movements, so disease of this portion gives rise to the most extended and complete paralysis.

"Another fact which I would impress upon you is one which anatomy in a great degree demonstrates, and which pathological research confirms—that the centre of volition for either side of the body is not

altogether on the same side of the body. Of the centre for the left side of the body, for instance, the intra-cranial portion is on the right side, and the intra-spinal portion on the left side, and these two portions are brought into connexion with each other through certain oblique fibres from the anterior pyramidal columns of the medulla oblongata, which cross from right to left, decussating with similar fibres proceeding from left to right, which belong to the centre of volition for the right side of the body."

Of the paralysis from lead-poison, the prominent signs are hand-drop, atrophy of limb, and those curious blue lines on the margin of the gums. Dr. Todd believes in a peripheral affection travelling from the surface to the centre, and *then* we have "epileptic convulsions and other symptoms of centric disease." Lead has been detected in the brains of these patients. The treatment advised for these cases consists in the elimination of the poison by various depurating excretions, the sulphur bath, galvanism, iodide of potassium, citrate of iron, and change of air. The cases of paralysis from injury to nerve tissue seldom admit of perfect recovery, owing to the imperfect regeneration of such tissue.

In illustration, we refer to a passage in page 75 of the book:—

"When the paralysis has been caused by mechanical injury, your prognosis must generally be unfavourable, more especially if any distinct solution of continuity have taken place in the nerve. Nerve-substance is very slow of regeneration; and when it is reproduced, the new fibres do not adapt themselves with precision to the old ones, and so they form very imperfect conductors of the nervous force."

Hysterical paralysis is an obscure malady, as, indeed, are all *local* hysterical affections; for instance, the three cases described by Sir Benjamin Brodie. Dr. Todd has, however, referred in the following passage to a diagnostic sign:—

"If you look at a person labouring under ordinary hemiplegia from some organic lesion of the brain, you will perceive that, in walking, he uses a particular gait to bring forward the palsied leg: he first throws the trunk to the opposite side, and rests its entire weight on the sound limb; and then, by an action of circumduction, he throws forward the paralyzed leg, making the foot describe an arc of a circle. Our patient, however, does not walk in this way; she drags the palsied limb after her, as if it were a piece of inanimate matter, and uses no act of circumduction, nor effort of any kind to lift it from the ground; the foot sweeps the ground as she walks. This I believe to be characteristic of the hysterical form of paralysis."

In the treatment, which is of course that of general hysteria, *we* have proved the efficacy of the valerianate of zinc.

The *one-sided* indications of paralysis from cerebral lesion must be distinguished from those of spinal causation. These are of course *centrifugal*, and are generally occurring in persons of intemperate habit. The local pains in the head often resemble the sensation from a nail driven into the head,—*clavus hystericus*.

The indications of *irregular* muscular action are often striking,—a derangement of the normal antagonism of action, as illustrated by double vision, &c. The *pain* from disease of the membranes is of course usually more severe than from that of the medulla,—as pleuritic exceeds pneumonic suffering.

The most common seat of lesion is the lateral ventricle, the corpus striatum and optic thalamus : blood, pus, or water being often discovered as the result of morbid action.

Of the four conditions of the muscles in paralytic limbs, Dr. Todd offers some accurate remarks. They are too long for quotation, but demand the close attention of the morbid anatomist.

The author differs somewhat from Dr. Marshall Hall, regarding the *hyper-excitability* of a paralyzed limb. He believes, however, that in *spastic* rigidity they may be so, but that in complete muscular atony they are *far less* excitable than those of the sound side.

The diagnosis between mere facial and cerebral affections is of the highest importance, as the decision on the first form may enable us to pacify the anxiety of patients and friends as to the result. We quote the following passage on this point:—

“It is remarkable how seldom the seventh pair of nerves is affected by disease of the brain. I cannot say that I ever saw an instance of complete paralysis of the orbicular muscle of the eyelids due distinctly to uncomplicated disease of the brain; and I have only seen a few in which the power of the muscle appeared to be enfeebled from that cause. Thus we have a point favourable and consolatory to a patient afflicted with *portio dura* paralysis; namely, that the affection being seated in that nerve need not excite the same alarm as to disease of the brain as in other cases of partial palsy, that of the third nerve, for instance. Moreover, disease of the brain would give rise to a different form of facial palsy.”

On the subject of the upward movement of the eyeball, the author speaks in controversion of Sir Charles Bell's theory, although on the subject of facial neurology generally he eulogises the acuteness of that learned physiologist.

“If” (writes our author) “you will take the pains to watch persons sleeping, whenever you have the opportunity, you will find that in *sound* and *tranquil* sleep there is no indication of active contraction of the orbicular muscle: there are no wrinkles of the eyelid, and no

depression of the brow, as when that muscle is in strong contraction ;— if, with the greatest care and gentleness, you raise the upper lid, you will find the eyeball directed forwards, maintained in this position by the equilibrium of its muscles. Should your attempt to raise the lid give rise to a reflex action, you will encounter a distinct resistance from the contraction of the orbicular muscle, and the eyeball will be turned upwards and inwards, more or less forcibly in proportion to the force of the reflex action.”

Too much stress cannot be laid on the subject of otitis and affections of the petrosal structure in reference to paralysis. These deeper maladies must be distinguished from the primary or *peripheral* affections (of which they may, however, be sometimes the result), which occur in certain subjects ; the rheumatic, for instance, from a mere current of cold air. We have been long convinced of the fact described in the following quotation :—

“ Periodical neuralgic affections are, I believe, very frequently due to the determination of some poison to a particular nerve—as the paludal poison, or some matter generated in the system, gouty or rheumatic. There is no reason why such morbid matters should not affect a motor nerve as they affect a sensitive nerve, causing paralysis in the one case, and neuralgia in the other.”

We might be inclined, perhaps, if hypercritical, to object to the term *rheumatic paralysis*, as there is rather a *reluctance* than an inability to muscular action. The fear of pain suppresses it ; a hero would move a limb thus affected ; a coward even might run from danger ; but in true paralysis, however strong the will, the power is lost. The recorded cases, associated with rheumatism and gout, are very *apropos*.

In these cases, the remedy recommended is iodide of potassium with galvanism. In many cases we might prefer the more specific colchicum, as we would combine quinine in intermittent maladies.

The author objects to the use of blisters, as they may irritate the cervical glands. We have not seen such effect produced by the fluid preparations of lyttae.

We think there might be more discrimination between spasm and paralysis. The want of antagonism may be a clonic spasm on the same side as the lesion, and we may thus avoid a long discussion on the *cross-pathology* from interlacing of fibres, &c.

In cases of cerebral lesion, it is very difficult often to decide on the exact locality. Clots in various tissues may sometimes be followed by similar symptoms. Perhaps the *hydraulic compensation* within the cranium may somewhat explain this dilemma. A clot may be found in a yielding or soft medulla, but the compressing effect may be only *felt* where a firmer structure first offers resistance.

The cases of diseased brain recorded in the sixth lecture strikingly demonstrate the two causes or conditions, the predisposing and exciting. Where a certain diathesis—as of gout—exists, and cerebral participation is indicated, we should enjoin great caution, as a very slight excitement may light up a local action not to be controlled. Thus Dr. Todd refers to the state of white ramollissement, the capillaries also becoming diseased, in which a slight exertion causes them to yield, and a clot at once ensues.

These cases are often combined with a protracted stage of renal disease, which the author terms “gouty kidney,” and with atheromatous deposits on the arterial tissue. The tracing of morbid progress in these maladies (p. 114) is very scientific, and proves how very slight causes may induce obstructed circulation, and eventually concentric hypertrophy, which is indeed the *ruse* adopted by nature to overcome obstruction by the addition of muscular force; so intricate are Nature’s modes, and consequently the study of our profession.

This lecture is concluded with some remarks adverse to the *routine* treatment of apoplexy. We quote this conclusion as highly practical:—

“If, upon full inquiry into all the particulars of the case, you find that your patient is of full plethoric habit, with too much blood in his body, and with a sufficiently strong heart, you may bleed him with every chance of success; but if he has been of intemperate habits, is labouring under organic disease of the heart and arteries, is of gouty or rheumatic constitution, then, whatever popular or medical custom may say, my advice to you is, hesitate much before you deplete by bleeding.

“The objects which it is proposed to gain by bleeding are a diminution of the cerebral congestion, and the stoppage of the hæmorrhage into the brain; and where it is quite clear that cerebral congestion does exist, and that that congestion causes the cerebral hæmorrhage, this is clearly a rational practice. But you must bear in mind that in a large number of the cases—probably the majority—there is in reality no cerebral congestion, and that the hæmorrhage is of a kind not likely to be stopped by taking away blood—by establishing another hæmorrhage elsewhere.

“On the whole, then, I think that the results of experience denote that the majority of cases of apoplexy are best treated by purging, shaving the head and keeping it cool—perhaps blistering, and that bleeding is rarely applicable, except to the young, vigorous, strong, and plethoric.”

In the seventh lecture there are some valuable remarks on diagnosis. This chapter contains a special reference to *arcus senilis*, as a symptom of cerebral disease.

The more we see of encephalic disease, the more are we conscious of

its obscurity, and of the importance of tracing these affections to their right causes. How often have symptoms been referred to disease of nerve tissue, when they have originated from poisoned blood?

In cases of coma, especially occurring in the *débauché*, we must not look alone to the *head*. It is most essential that we ascertain the state of the renal secretion. If this be very scanty, or nearly suppressed, there can be little doubt of the presence of urea in the blood circulating in the brain. Even if the urine be in large quantity, it may yet poison the brain blood if it be of low specific gravity, and fails in eliminating the *solids* of the urine. In an analysis by Dr. Beale, the urine of a patient who passed five pints daily "contained twenty-two parts of solid matters in a thousand, and these consisted chiefly of *albumen and extractive matters*, whereas twelve or fourteen parts, at least, ought to have been urea." In such a case, coma and convulsions are very likely to ensue. In illustration of these facts, we quote (by anticipation) the following test from the sixteenth lecture:—

"A blister was applied to the back of the neck; and when it rose, the serum was carefully collected, and tested for urea. The whole quantity of serum was evaporated to dryness over a water-bath, and the residue was extracted with alcohol, which is a ready solvent of urea. This alcoholic extract was then evaporated to dryness, and a little water added so as to make a syrupy mass, which was plunged into a freezing mixture, and a few drops of pure nitric acid were added. If urea be present, the characteristic crystals of nitrate of urea are soon formed in the solution, and may be recognised either by the naked eye or by the microscope."

In this *renal epileptic coma* Dr. Todd employs blisters, purgatives, and diaphoretics. The best purgative being claterium, of course cautiously administered.

In the cases of the delirium of drunkards we have often witnessed the injurious effect of agitation and exertion; for they are often as sensitive as the *mimosa*. The author is of the same opinion:—

"About two years ago a man was admitted here for epileptic delirium. Finding that his delirium was very noisy, and disturbed the other patients, I had him placed in a separate ward, where he recovered from his delirium. It was found necessary to move him upstairs, and shortly afterwards he became delirious again, and died comatose.

"I am satisfied, from these and other cases, that there is nothing respecting which we ought to be more cautious than as to moving patients either in or just recovered from delirium; even to move them from one room to another on the same floor is dangerous, still more moving to any distance, or to another floor. Let us take this case as a warning of the necessity of great caution and circumspection before we sanction the removal of a patient under such circumstances."

The subject of Hemiplegia occupies seven lectures, and we deem it the most valuable monograph we possess on that affection.

Dr. Todd remarks that the *reflex actions* induced by peripheral excitement are attended by great uneasiness from "an irritable state of the sentient nerves and of the centre of sensation."

He adds:—

"There is, however, a curious and very interesting involuntary movement, which you will sometimes witness in hemiplegic cases. It occurs simultaneously with yawning, and less frequently with the actions consequent on emotion, surprise, joy or pleasure, or grief, as in laughter or crying. I may here mention that yawning is a very frequent, and sometimes a troublesome, and not always a favourable symptom after an attack of hemiplegia. It is more frequent in proportion as the shock is severe, but it seems to come on, as the first effects of the shock are declining."

We have known practitioners apply friction to the *drawn side*; we were, therefore, not surprised to read:—

" 'His face,' the patient's friends will tell you, 'is all drawn on one side;' and they will hardly believe you when you assure them that the drawn side is all sound, and that its being drawn is merely the result of the want of a resisting power on the opposite side."

The mechanism of cerebro-spinal action is of the deepest interest; in its consideration we should have the distribution of the nerves ever in our mind's eye. Of the *rationale* of hemiplegic palsy we read as follows:—

"You know that paralysis may be caused by any lesion which interrupts the continuity of a nerve or set of nerves, and which interferes with the due connexion between these nerves and the centre of volition; or by lesion of the centre of volition itself. Thus, then, you may have hemiplegia dependent on peripheral affection of the nerves, the morbid process spreading from periphery to centre—this is a rare and an incomplete form of hemiplegia,—or you may have it caused by a lesion in some part of the brain or spinal cord. If the lesion be situated within the cranium, above the point of decussation of the pyramidal columns of the medulla oblongata, the palsy will be on the side of the body opposite to the lesion: this is the most common form of hemiplegia. If it be seated in the spinal cord, below the decussation, the palsy will be on the same side of the body as the lesion; but in such a case, which is very rare, the phenomena present certain very essential points of difference from cerebral hemiplegia."

Then follows a description of these six forms, into which Dr. Todd divides hemiplegic affections,—lesion of the brain—that of the spinal medulla—epileptic hemiplegia—choraic hemiplegia—hysterical hemiplegia—and peripheral hemiplegia. In comparing the surface sensi-

bility, Dr. Todd employs the compasses method of Weber, on approximating the points of which on the paralyzed side they seem to the patient as one—on the sound side, as two. After deciding that ramollissement results from diseased or plugged arteries, Dr. Todd divides the cases of cerebral hemiplegia into three classes, depending chiefly on relaxation and rigidity of muscle; and it is clear that, in regard to treatment, this division is of vital importance. Atonic hemiplegia may occur in two modes, with or without the state of coma. The whole of the author's remarks cannot be read too carefully. We have only space to quote the passages referring to the proximate cause:—

“The evidence now accumulated respecting the lesions which give rise to these two forms of hemiplegia, indicate, I think, very distinctly that they result from defective circulation through the brain, and enfeebled nutrition of the cerebral matter. In some instances actual obstruction of important arterial channels can be shown; in others, there is a marked degeneracy of a large portion of the arterial and capillary system which may have preceded or gone on simultaneously with the cerebral degeneration. In all cases the cerebral disease reaches such an extent, that the vesicular matter imperfectly generates the nervous force, and the fibrous matter becomes a bad conductor of it, or even a non-conductor, or its continuity is interrupted, and so its power of conduction is rendered mechanically impossible. And, if the softening of brain have been of sufficient duration, there will be found in it the large vesicular bodies, containing fatty particles in a state of minute division, which indicate a further degeneracy of the brain tissue, or an attempt at a reparative process.”

The treatment consists in semi-recumbent repose, enemata, in cases of obstinate constipation, large doses of calomel or croton-oil; ammonia or chloric ether subsequently.

The following suggestions close the lecture:—

“It sometimes happens that in these cases a rigidity of the muscles comes on very early, which indicates an inflammatory process going on around the clot, which may end in the formation of pus and abscess, and is to be combated by the use of mercury. But you must be careful to distinguish this from the muscular rigidity which is of late occurrence, and results from a restorative effort of nature; and with which it is therefore not desirable that you should interfere.”

The cases of hemiplegia with *rigid* muscles are divided into those of *early* and *late* rigidity. The author's idea of the cause of slight and partial forms is:—

“That it depends upon a state of irritation, propagated from torn brain to the point of implantation of the nerves of the affected muscles. But, you will ask, why is it that in some cases of clot the hemiplegia

will be accompanied with complete relaxation of muscles, while in other cases the rigidity of which I have spoken exists? The answer to this question is as follows: in the cases where there is no rigidity, the clot lies in the midst of softened brain, and has not in any degree encroached upon sound brain; but when rigidity exists, the clot has extended beyond the bounds of the white softening, and has torn up to a greater or less extent sound brain."

It seems that both irritation—*i. e.*, a state of exalted polarity, or high tension of nerve tissue—and inflammation of brain may induce this rigid palsy. Both may interfere with the conducting force of nerve fibre, or the productive faculty of vesicular tissue. "A paralyzing lesion is also perfectly compatible with an irritative one."

The second form of late rigidity is sometimes tetanic, and is often associated with inflammation. Dr. Todd considers this a most perilous form—many dying early after the onset. In some the rigidity lapses eventually into relaxation, the muscles then becoming atrophied in an extreme degree. In one case, under the author's care, the disease, resulting from inflammatory ramollissement, the deltoid and the scapular muscles became so attenuated that the head of the humerus actually fell out of the glenoid cavity. There are few protracted cases of this kind that are not marked by rigid digital flexion both of the hands and feet; often that of the popliteal and calf muscles. The author accounts for the causation of this state by a shrinking of cerebral tissue consequent on the effort at cicatrization, the muscles becoming hence both irritated and atrophied. In one hemiplegic patient, a lady of sixty, a very curious psychical phenomenon was observed—the substitution of one word or name for another. On her recovery even, she always misnamed the members of her family.

Peripheral hemiplegia, the "creeping palsy" of Cheyne, is so named by the author from "the mode of access of the paralysis;" the first sensation being that of numbness of an extremity, followed by progressive diminution of power, and then of temperature.

Hysterical hemiplegia is a condition to which our thoughts have been long directed. But how can we define it, seeing that we know so little of that we term hysteria? It depends probably on some mystic fault of innervation which, with all our microscopes, will probably ever elude our search. That form of enervation we term aphonia often comes and goes instantaneously—it is a sort of hysterical Jack in the box. In former numbers of this Journal we have referred especially to two interesting cases of this form. The one was a married lady, whose paroxysms always came on about midnight: the cause was evidently emotional. The subject of the other was a very beautiful girl of fifteen, in whom aphonia existed for many months, the only moment of articulation

being the pronouncing the name of a jewel in the exhibition, which was to be her own if she named it. Among many interesting cases related by Dr. Todd is that of a male hypochondriac who became completely aphonic from extreme excitement.

Of the forms of epileptic hemiplegia very interesting cases are related by the author. The remedies recommended are valerianate of zinc, sumbul, cod-liver oil, iodide of potassium and steel, purgatives, and the shower-bath.

With Dr. Todd's anathema of the congestive hypothesis we do not quite coincide. He asks—"What is the paralyzing cause, when the paralysis is so transient as to pass off in a few minutes?" We confess we have been wont to explain this by reference to the forces or conditions of the blood, however the author may term it a clumsy explanation, and that the vessels are only secondary elements in the construction of the organ. We believe that, however, the "elements of the tissue" may *predispose*, any exciting cause in the lungs or the heart, and especially if that be attenuated, may instantly induce the congestive state, and the disorder itself of which we are writing. Nay, without the "morbidly excited polarity," as it is termed, of nerve-tissue, hyperæmia, excess or poisoning of blood, may be sufficient for the explanation, however we may conclude that ramollissement and clot may form the gist of our arguments in the severe and fatal maladies.

The observations of Dr. Todd on the anæmic condition of the brain in some cases of coma are most judicious. He very truly observes, that the erect posture induces the attack, and the recumbent relieves it. The fact seems to point to the acceleration of pulse in the erect position as analogous to the hæmorrhagic effort. The fashion of routine depletion in sudden seizures has been long on the wane. We believe there can be but few very old women of the very old school who would now call for their *porringer* and draw out their lancee, when they are summoned to a *fit*. Some of these cases, indeed, can only be saved by stimulants; and the author cites an interesting case from Mr. Stokes, in which the withholding of stimuli and the blistering of the head induced prostrate collapse, from which a renewal of stimuli completely recovered the patient, who subsequently, however, died from mitral disease. On the proximate cause of this form, thus writes our author:—

"Chorea being due to a disturbed nutrition of some part of the brain in intimate connexion with the centre of volition, the disturbing cause may act exclusively on one side of the brain, or it may operate more on one side than the other. The effect of this disturbance is first manifested in an irritative state, creating the choreic movements, and this passes sooner or later into an exhausted or paralytic state."

With Dr. Todd we believe that this proximate cause will be much elucidated by subsequent examination of the tissues constituting, as we believe, the centres of volition and emotion. Regarding the specific gravity of cerebral tissues considerable difference has been observed. Dr. Aitken found in a choreic subject that the corpus striatum and optic thalamus on one side were 1·025, on the other 1·081. Dr. Todd believes that syphilitic contamination is often at the root of the epileptic attack.

The principles of treatment in these cases seem to be the restoration of systemic health, and the employment of passive motion. Depletion, if absolutely required, should be sparingly employed, and only at the onset of attack. Mercury should be administered only in cases of cerebritis or syphilis, and altogether rejected when albuminuria exists. The proximate causes of hemiplegia are never of course to be sought for much below the decussation of the anterior pyramids. One very interesting fatal case is recorded, in which the spinal cord on the left of the median fissure was compressed and flattened by an enlarged odontoid process.

The influence of the poison of lead is, in the opinion of the author, peripheral, *i.e.*, the muscles themselves are primarily affected, then, if protracted, the nerve tissue, and subsequently the brain.

With his usual zeal in search of truth, Dr. Todd has submitted different portions of the brain to a very scientific examination, both to compare its specific gravity and detect lead poison, and also for the discovery of the tritrate of urea in cases combined with evident renal disease. The process was very successfully conducted by Mr. Conway Evans. Dr. Todd adds in a note:—"I have sought in vain for evidence of the presence of carbonate of ammonia in the expired air and in the blood, as suggested by Frerichs."

When syphilis affects the dura mater its state is probably analogous to that of the periosteum, and we have an interesting examination of the brain of a patient dying in this state. The dura mater, extremely thickened, adhered to the right parietal bone, and also to the visceral layer of the arachnoid, the cerebral tissue being partially red and softened. In cases of this description, Dr. Todd strongly recommends the iodide of potassium as a specific in removing the morbid deposit; but it is requisite to follow up this by other remedies. The author's judicious precepts on this point deserve quotation:—

"In such cases we must trust to the repeated use of iodine as one element of cure, care being taken to watch the constitution of the patient during its administration. And we may aid the influence of the iodine, by the occasional use of mercury, either at the same time with the mercury, or, as I prefer it, alternately,—that is, giving first

a short course of mercury, then of iodine, then of mercury, and then omitting both, and using only tonic means, both medicinal and hygienic, resuming, if occasion should demand, the mercurial and iodine treatment. And you will also find great benefit from the prolonged use of well-made decoction of sarsaparilla, or of cod's liver oil, or of both."

In the relation of the very interesting and rare case of idiopathic trismus, Dr. Todd alludes to the influence of salivation in inducing that state.

The pathology of chorea is quite as obscure as that of hysteria, of which indeed (and we must adopt the term hysteria for want of a better) it is but a variety, occurring in subjects of the same diathesis, and constantly excited by some emotional influence. As the attack is usually sudden, often in consequence of a shock, a sort of *similia similibus* mode seems to be the kind of remedy most efficacious—such as the douche, or splashing, or ablution with cold water. Quinine, or the liquor cinchonæ, iron, and the most nutritive diet should be added. In cases of attenuation, cod-liver oil is very useful. If the urine possess high specific gravity, the additional remedy is obvious. If ascarides exist, enemata of salt and water are useful. The concluding lecture of Dr. Todd, however, illustrates the most important form of local hysteria, on the correct diagnosis of which not only the reputation of a physician but life itself may depend. There are few who have not occasionally been placed in dilemma by cases which called for the closest and most patient attention ere the mind could be satisfied of their nature. The case of Harriett B——, related by the author, is of this kind, and as we have seen and have recorded several analogous cases in our Journal, we point to them as far more psychical than organic. As a proof of the phenomenon of psychopatheia, as a late author has termed it, Dr. Todd thus writes:—"There is another very important feature in the case which deserves especial notice—when her attention is much engaged she certainly suffers less." We have been aware of conditions of hyperæsthesia of the skin, in which if even a feather were dropped on the abdomen, the patient shrieked with agony, and yet if the attention could be intensely fixed on another subject, pressure could be borne without suffering. It is clear this unconsciousness could not be were inflammation present. It is evident that an erroneous or morbid notion of self lies at the root of this puzzling malady, which may assimilate indeed the most acute form of peritonitis if pain only were regarded in the symptomatology. Dr. Todd reasons very scientifically on his case, alluding, in the formation of his diagnosis, to other signs, as the prominence of the upper lip, the languid drooping of the eyelids, leucorrhœa, amenorrhœa, &c., which,

if duly studied, will lead even the young student away from error, and prompt him to employ antispasmodics instead of depletion ad deliquium, perhancee ad mortem.

The irritable uterus and breast offer also very prominent examples of this local hysteria. They are all, however, so analogous in character, though variously localized, that the history of one may elucidate the entire class. Whenever, therefore, we are consulted in a malady (especially if it be of a young female) the name of which we finish by *dynia* or *algia*, we cannot be too careful in our decision as to whether the blood or the nerve be the seat of the proximate cause.

In his allusions to gastrodynia, for instance, Dr. Todd remarks :—“We must be very careful to distinguish this from the pain resulting from ulcer of the stomach,” &c. Perhaps the diagnosis here is more clear than usual, as *injesta* invariably aggravate the inflamed or ulcerated membrane, whereas irritable gastrodynia is as constantly relieved by them.

We feel half disposed to follow up this most interesting and important subject, as it is precisely in the class of persons whose cases we are now discussing in which this softened and abraded mucous membrane imperceptibly extends and deepens to the other coats of the stomach, until after a full meal, or some extraordinary exertion, the tissues yield in a moment, and the gastric contents ooze out into the peritoneal cavity; and this without any especial attention to the case, or unfavourable prognosis. These cases are more common than many believe. We have seen constantly exhibited to the Medical Society of London specimens of this perforation of the stomach, in which the orifice looks as if *punched out* by an instrument. There is a most interesting case recorded in the last volume of the Society's Transactions.

We may observe *en passant* that in nervous gastrodynia we have experienced the greatest benefit from the subnitrate of bismuth and henbane, together with frictions of camphorated spirit and wine of opium to the region of the stomach.

“Hysterical spine,” as the author terms it, comes under the same category; the pain is extensive, often along the whole column, and hyperacute, thus distinguishing it from caries, which is less severe and limited to a spot. In these forms of hysteria, therapeutics seldom fulfil our wishes; psychical remedies are often more gratifying; change of scene and air, and pleasurable concentration of the thought away from the painful spot, will seldom fail in relieving if they do not entirely remove the malady. Cataleptic affections sometimes form a part of hysteria, the muscular fibres being unusually rigid. The psychical phenomena are in these cases rather anæsthetic as to external agency; to a slight blow or pinching the patient is often totally in-

sensible although perfect consciousness to all other points exists. On the obscure nature of hysteria we did not expect that even so acute a pathologist as Dr. Todd could enlighten us much; original constitution of nerve tissue, defective assimilation, unhealthy blood, are the chief physical causes, according to our author, and they lead us of course to amend these faults by the nutritive and tonic plan. In the relief of the paroxysm, cold water splashing, camphor mixture, and ammonia, and hyoseyamus, with enemata of turpentine, and assafœtida are the chief modes adopted by the author.

It will be perceived, from the very slight points of difference between the learned lecturer and ourselves, how highly we appreciate the practical bearing of this book; it is replete with precepts which ought to be treasured in the mind of the practitioner. The lectures are addressed to students, yet there is much instruction even for the man in extensive practice. For the reader, perhaps a more methodical arrangement of subjects would be preferable. In our analysis, therefore, we have taken the liberty occasionally of leaping onwards to a resumption of the subject under our review, that we might concentrate the points. We trust Dr. Todd will still proceed in these intricate investigations, as we are certain that they are the only legitimate mode of elucidating both the nature of disease, and the mutual influence of mind and organism, as far as the Creator has ordained that these mysteries *shall be* unveiled.

ART. III.—PSYCHOLOGY OF LOCKE.*

THERE is some danger, if any science real or pretended happens to become unusually popular, of other branches of knowledge being merged in it by its admirers and advocates. There was a time, not far distant, when this was exemplified by some of the phrenologists. The assertion was hazarded that we must henceforth seek the true psychology simply in the conformation of the cranium, not only as indicating each man's talents and character, but as also mapping out the human mind itself with its several powers. We trust this time is gone by; for the folly of seeking *out* of the mind what is *in it*, must be evident enough, surely, to every man who has carefully read any good work on the philosophy of the human faculties.

Our renowned countryman, JOHN LOCKE, was an excellent example of freedom from all such pedantry. He had been intended for the medical profession; his predilection for it never ceased; and Dr.

* Locke's Essay on the Human Understanding. Abridged by J. Murray, LL.D. Dublin, 1852.

Sydenham, the most celebrated London physician of his day, did honour to Locke's judgment in allowing himself to be guided by some of his views, and dedicated to him his greatest work. Yet we look in vain, throughout the speculations of Locke, for any predominant tincture of his earlier pursuits: he seems on the contrary fully to have appreciated the independent character of those tracts of thought to which he afterwards so successfully devoted himself; and this is more evident in none than in that which related to the "Human Understanding." He allowed no physiological speculations to divert him from his inquiry into what our own mental experience teaches us; and Dugald Stewart has remarked that the "Essay" does not contain "a single passage savouring of the anatomical theatre or of the chemical laboratory."

The style of Locke is plain and unambitious. For a metaphysical work the language of the "Essay" may well be pronounced popular, as being marked by a matter-of-fact and straightforward spirit, and containing occasional passages of great though unadorned eloquence. Indeed, his figures have sometimes obscured his meaning, while his use of terms is not always uniform. The admirable precision and accuracy of Dugald Stewart, to whom scarcely any metaphysical writer whom we are acquainted with can be compared in this respect, was not to be expected in that age, and especially on such a subject. It required years and volumes of controversy, adjusting of misrepresentations, clearing up of difficulties, removal of ambiguities, collisions of systems, and clearances of old-established modes of expression borrowed from Aristotle, Descartes, and other writers, before such a style could be arrived at, in metaphysics, as that which honoured the English language in the works of the most learned British psychologist of his day.

There is a common prejudice against "Abridgments:" yet how many works on the subject of the Intellectual Philosophy would bear well, and with advantage to the reader, to be presented to him in an abbreviated form. The truth is that Abridgments are often rapid and useless from failing to convey a full and faithful picture of their original. This, for instance, is sure to be the case, almost, with all the attempts to exhibit in brief the philosophy of the Germans, in English. Yet what student would not have felt very much obliged to Kant, if instead of contenting himself with giving to the world his *Prolegomena*, containing certain heads of his great work the *Kritik der reinen Vernunft*, which after all require explanation by reference to the latter book itself, he had set himself to make a re-composition and digest of the *Kritik*, incorporating under their respective subjects the contents of the various appendices (*Anhänge*) which are so formidable and tiresome to the student, native or foreign, and saying once and for all what is often so tediously repeated, in various forms, and which would have

been so capable of abridgment, especially by the hand of the celebrated writer himself? Though Locke's "Essay" is not fully open to a parallel criticism, we nevertheless think that where a clear apprehension of his system and doctrines is the sole object, a judicious abridgment might be far from useless. Such was attempted by John Wynne, of Oxford, in 1695, in the lifetime of Locke, to whom it was dedicated. It appears to be on the whole very well executed, the only fault which it suggests to us being that it omits certain parts of the work altogether; among which are the First Book, on "Innate Ideas," and the discussion on the "Will," in the Second; the abridger thinking the former involved in other parts, and the latter too long for his pages. This Abridgment, however, was only intended as an Introduction to the work itself, and Locke, as we learn from the preface, consented to its publication.

Dr. Murray proposes to "reduce the repetitions, diffusiveness, and irrelevant matter," which may be found in the "Essay," "not indeed to the lowest possible amount, but for the business of the Examination-hall" of Trinity College, Dublin, and the "advantage of the general reader;" and he defends the idea of such a compendium, by Locke's own candid remark, in his "Epistle to the Reader," that his work might be reduced to narrower compass, "the way it has been writ in, by catches, and many long intervals of interruption, being apt to cause some repetitions." The compiler also says that he has "sought to disembarass the author's meaning in prolix or complicated passages, and generally to assist the connexion, by including within parenthesis-marks, and indicating by other definitive signs, those clauses and terms which seemed to require such specification." This "Abridgment," which is intended rather for the class-room than the library, seems to us to have been faithfully executed according to the compiler's plan; we have a quarrel with it only on the ground before-named, that it omits certain parts—which are indicated—the rule being not to admit anything excluded from the course prescribed to the students of Trinity College. Thus we miss, among other matter, the whole doctrine concerning "Innate Ideas." This omission we regard as a drawback, so far as it goes, from the usefulness of the work: for no mere private object or design, can easily reconcile us to the idea of not presenting a full and faithful picture of the corresponding original work, in an Abridgment, however much it may be a miniature.

The general estimate of Locke, in the "Preface" of the work before us, cannot be charged with indiscriminating partiality on the one hand, nor on the other with that unscrupulous and we may say unjust criticism with which our great metaphysician has been visited by not a few of his successors of various schools. For not only has his

"Sensualism," as it has improperly been called by the Germans,* generally, been condemned by them, as a whole, and treated almost as unceremoniously by the French Eclectic School; but it has met with little favour from some recent English writers, under the almost equally inappropriate name of "Sensationalism," which it would have been fair enough to apply to the Ideology of Condillac, and to the subsequent gross materialism of Cabanis and others; but which can never be fastened on Locke's system, except by those who take a most perverse and one-sided view of its plainly avowed and developed elements. In the preface of the present Abridgment, "originality, impartiality, candour, penetrating research, independent simplicity, and unpretending piety," are fairly claimed for the renowned author. "More dazzling theories than his have fascinated the eyes of men, more laboured researches have eluded them; but a more truth-loving inquirer after the knowledge both of God and of man than Locke, or a more trustworthy guide for youth toward, and (to a great extent) along *the proper road*, never yet professed either to search or to teach." In this view his work is a good medium of instruction to metaphysical study, as safe a practical text-book, as the youth of any community can enjoy." Yet, while thus favourably disposed towards Locke, and holding that the "Essay contains the germs of most of the metaphysical truths that have since received the most general assent," the compiler admits that it is "deficient in extent," and, in certain points of detail, "erroneous and even self-inconsistent." This brief estimate agrees very much with our own views.

It cannot be denied that Locke was the first who explicitly made an inquiry into the powers and phenomena of the inner man the *prime* object of metaphysical philosophy. Unlike Aristotle, he discarded all speculations which do not obviously come within the range of the human faculties: all ontological inquiries he expressly repudiated. Bacon's object was external nature, though he threw an incidental light on the method of all scientific pursuits, which was strong enough to lead the way to a psychology based on experience. Descartes, who was

* Even so recent, and in the main impartial a writer as Chalybäus, is not exempt from taking a similar sweeping view of Locke's psychology. He draws from it consequences scarcely less doleful than those which may be gathered from some of the eloquent lamentations of M. Cousin. He does not indeed intimate that it had any implicit relation to the Revolution of 1789, and the "Reign of Terror;" but he plainly charges it with leading to universal scepticism: Diess der Empirismus oder Sensualismus in seinen Grundzügen. . . . Wir könnten mit jener Lehre nicht einmal Ordnung und Zusammenhang in der wirklichen Welt mit Sicherheit voraussetzen, geschweige uns mit Zuversicht zu dem Uebersinnlichen, zu den Ideen von Gott, Freiheit, Unsterblichkeit, erheben; da diese Ideen gar nicht auf sinnlichen Eindrücken beruhen, mithin nur als eine Fiction des dichtenden Verstandes, ohne alle äussere Berechtigung erscheinen würden.—*Historische Entwicklung*, u. s. w. Vorlesung I.

endowed with such rare talent for speculation, did not attempt a *system* of the phenomena of consciousness: he limited himself to certain questions, though these were no doubt fundamental. The same may be said of Spinoza, Malebranche, and even Leibnitz himself; who, much as he did to unfold certain great principles of human knowledge, owes his fame to his discovery, coevally with Newton, of the Differential Calculus. Locke, as is admitted by his able and severe critic, M. Cousin, "made the Origin of Ideas the grand problem of philosophy." His aim was the *Understanding*, so that the term "Intellectual Philosophy" is strictly applicable to his speculations. He made his inquiries into sensation, will, desire, and all other phenomena, subservient to the end of searching into the "Origin of our Ideas;" and he traced them all to two sources, "Sensation and Reflection."

Locke directs his First Book to the question of "Innate Notions:" the Second treats of Ideas, simple and complex; and under this head he also considers various Faculties and Operations of the mind: the Third Book is on Words: and the Fourth on Knowledge and Opinion. His brief statement of his general design is: "To inquire into the Original, Certainty, and Extent of Human Knowledge, together with the grounds and degrees of Belief, Opinion, and Assent." To a reader who may chance to have studied any of the more celebrated among the modern psychologists of the Scottish School, who have given a digested outline of the elements of the human mind, Locke's Table of Contents will appear heterogeneous and unsatisfactory, wanting in logical division, and defective in rigid analysis: but it should always be remembered that his object was not exactly to give a detailed and exhaustive system of all the phenomena of our consciousness, but to trace the manner in which our knowledge is acquired. This may account, in some measure, for the desultory air of many of the discussions, when viewed in relation to the natural desire which every reader has to refer everything to the landmarks of system: but it will still be found that the main object of ascertaining the sources of our knowledge, is rarely if ever lost sight of. Moreover, the freedom from the trammels of technical system which characterizes the work, may perhaps have been favourable to the independent way in which our great author enters afresh upon each successive topic of discussion, and to the natural method in which he analyses so many of the complications of thought.

In what sense did Locke use the term "Ideas," the origin of which is the subject of his great work? He himself replies: "whatsoever is the object of the understanding when a man thinks—whatever the mind can be employed about in thinking." Many of our readers will be aware that the term "Ideas" was originally used to signify the eternal

patterns, or forms, supposed by Plato to exist in nature, and according to which God made all things. It was employed by Descartes, in a general signification, to stand for the objects of sense, imagination, and memory, as well as of the intellectual faculty itself. Locke evidently adopts the term in its widest meaning, for all the objects of human consciousness. So extensive is his sense of it, that we may say it is almost a synonyme for the phenomena of the mind in general. There is no doubt that Sir W. Hamilton's remarks (in his Paper on "Idealism" in the *Edinburgh Review*) respecting the fluctuations and vacillations of Locke's language, are substantially correct. He often fails to assign what in the Kantian metaphysic would be termed the "place" of the mental operations—that is the peculiar faculty to which they, in any given case, belong. He does not distinguish by his terms what he really intends to be distinct; but confounds object with operation, sensuous images of fancy with the notions proper to understanding, consciousness with perception and idea, and idea with notion, representation, and sense. The only way to deal with this laxity in the use of terms, which sometimes extends almost to materialism, if not quite—provided we literally interpret certain isolated passages and expressions—is to throw aside the rigid analysis of terms which has (advantageously indeed to psychological pursuits) occasioned so much controversy in the Scottish School, especially respecting idea and perception, and to understand Locke as often using these and other terms in a much more popular and general sense than they have since his time acquired in metaphysical writings. With Locke, the "Original of our Ideas," is in fact the same thing as the origin of our knowledge.

Now it is Locke's doctrine that all our ideas—all our knowledge—can come but from two sources, separately or combined, namely Sensation and Reflection. Whatever ambiguity there may be in his use of these terms, especially the latter, and notwithstanding the severe criticism which has visited this theory, we cannot but maintain that there is an obvious and important sense in which it is true that all our knowledge finds its way, by means of "experience," (as Locke also holds,) through these two channels. If any one were to ask what Locke means by "Reflection," we would reply, in general terms, he mainly means the power which enables us to *take notice of what passes in our minds*; and by "experience" he means the *aggregate of the particular instances* in which we are the subjects of sensation and reflection. Even Kant, the actual founder, if not the originator of the German ideal school—the great advocate for knowledge *à priori*, plainly lays down the position, as clearly as Locke himself, that all our knowledge begins with experience, and that the cognitive faculty itself is first called into

action by the senses.* That it is also by means of the senses that we become acquainted with the properties and phenomena of the external world, no one who admits its existence can for a moment doubt, whatever dispute there may be about the precise mode in which we gain our irresistible conviction of its reality. And as to the knowledge of ourselves as conscious beings, the knowledge of our thoughts and inward processes, generally, it is equally evident that in order to gain this, we must turn the mental eye, as it were, within—in other words, observe what passes in our minds. The knowledge of the existence of God, our author derives from our knowledge of ourselves, or he thinks at least that it may be thus satisfactorily obtained. This then is what Locke means by Reflection, which, (so understood,) combined with Sensation, assuredly gives us all that we can know, from our natural powers, of the Universe, the Ego, and the Deity—the three great “Ideas” of the Transcendental School, and which it pronounces to comprise the whole sphere at which speculative reason aims.

But it has been asked, how can a certain class of ideas, those, namely, which appear to rise spontaneously in our minds, on certain occasions adapted to elicit them, as also those truths or impressions, intuitions, primary beliefs, first principles, axioms, self-evident truths, logical, or psychological (as, “I exist”)—how can such truths as those which in the modern idealism would be termed “synthetic judgments *à priori*,” be derived from Reflection, or from Reflection combined with Sensation? Is it thus that arises the idea of substance, for example, which I cannot but have, spontaneously, wherever I have experience of property—the idea of space as a necessary condition of all external objects—the idea of cause as the necessary antecedent of all change? These ideas have their corresponding *judgments*, which are synthetic, as containing more in the predicate than the mere analysis of the subject; for example, *every change must have a cause*; and there are many others, such as the true mathematical axioms, and in short all those propositions which are self-evident, and neither require nor admit proof—those which we term intuitive, in the English, not the German sense of intuition (*Anschauung*). Now, we are ready to admit that such knowledge as this is not, in one sense, gained from experience, either by means of the external or the internal faculty (Sensation or Reflection), or both combined; but we are just as clear that in another sense, and that the sense of Locke, such knowledge is thus gained.

* Dass alle unsere Erkenntniss mit der Erfahrung anfangt, daran ist gar kein Zweifel; denn wodurch sollte das Erkenntnissvermögen sonst zur Ausübung erweckt werden, geschähe es nicht durch Gegenstände, die unsere Sinne rühren? u. s. w. —Kritik d. r. Vernunft, s. 695. Leipzig, 1838.

It is, in the strictest sense of the word, by "Experience," that zoologists have arrived at the conviction that "all horned animals have cloven feet;" yet no man feels any absurdity in supposing that the very same experience might possibly bring to light some remarkable exception to the rule: but in the case of the principle of causation, which tacitly underlies the assertions and even actions of very young children, we can conceive of no possibility of any such exception. We do not gain our knowledge of the general principle of causation as we gain a knowledge of the properties of the surrounding universe, namely by a gradual process. Has any event occurred—has any change of phenomena presented itself?—There *must* have been a cause. Convictions, principles, (call them what we may,) such as these, no doubt depend on our mental constitution itself; they are elicited as it were full-grown by their appropriate antecedents, at a period of life far too early for us to detect their rise, and they remain in the mind fixed and immovable throughout life. But, on the other hand, how do we arrive at the knowledge that such principles are necessary laws and conditions of thought? Surely by "Experience" and by nothing else—experience of our own consciousness. On this ground we are prepared to justify Dugald Stewart's expression—the "Inductive Philosophy of the Human Mind:" for he did not mean by this that our primary beliefs, or intuitive convictions were arrived at by a gradual process of induction: he only meant that we must reach a true system of the philosophy of man's mind, by carefully observing the facts of man's consciousness, and that we can then only say that a certain principle is a law of our own mind, and of men's minds, in general, when we find this principle operating uniformly and universally.

It should be remembered that notwithstanding Locke's awkward method of dealing with the undefined phantom of "Innate Ideas," he tacitly admits, over and over again, all that Descartes and Leibnitz really contended for, in connexion with this ill-chosen phrase—and this too, we may add, on Leibnitz's own showing, in his criticism of the "Essay." It is absurd to talk, as some of Locke's more modern critics have done, as though he meant to reject intuitive truth, either speculative or practical. The Essay contains striking illustrations of both. What he did mean was that when the external faculty has been brought into play by its appropriate objects, the internal faculty is also excited to action, and we are put into possession of a variety of truths which we should never otherwise have been able to know; or, in other words, Experience gives us, in Sensation and Reflection, all our knowledge. This is Locke's fundamental principle; and, in the sense in which he understood it, we doubt not that he is right. We may

here add, that when Locke speaks of the mind as like white paper, or a *tabula rasa*, he can only, with fairness, be understood to mean what has just been said—that without the operation of the external and the internal faculties, the soul or mind would have no actual knowledge: he never intended to say that we have no natural tendencies, sensitive, intellectual, and moral, any more than he would have denied that the appearance of the writing on a fair sheet will depend in part on the texture of the paper. And even in attributing, with his frequent laxity of language, so large a portion of our “Ideas” to Sensation, as being “derived by the senses to the understanding,” he is not wrong in claiming that priority for Sensation, in the natural order of the mind’s procedure, which Kant himself clearly implies, when he asks, “by what means can our cognitive faculty be awakened to exercise, otherwise than by the objects which affect the senses?”*

Dugald Stewart, certainly one of the most competent of Locke’s critics, admits that notwithstanding some unguarded expressions his fundamental doctrine “contains little that is reprehensible,” as it may be interpreted to mean nothing more than that “the first *occasions* on which our various faculties are exercised, and the elements of all our knowledge acquired, may be traced ultimately to our intercourse with sensible objects;” and that these occasions are furnished, “either by impressions made on our external senses, or by the phenomena of sensation and thought of which we are conscious.”† Yet the same distinguished writer, who was as candid as he was competent, adds that Locke’s comments on the cardinal principle of his system, in different parts of the Essay, convey much more than is implied in the above interpretation; so that its author not only affirms that Sensation and Reflection furnish the occasions, in our experience, on which various elements of thought present themselves; but that these two faculties actually give to the mind all its simple ideas, in the “literal sense of the expression:” inasmuch that they are all either immediate subjects of our consciousness, (such as the ideas we have of our own mental operations,) or copies of some quality perceived by external sense, another form of consciousness. We admit that no one can read the “Essay” attentively, and fail to observe that many such passages do occur. This has also been remarked by Dr. Reid, in his “Inquiry;” who regards Locke’s fundamental position as being, “in plain English, that mankind neither do, nor can think of any thing but of the operations of their own minds.”

Now it must unquestionably be granted that many of our ideas (to instance only those of space, time, substance, cause,) are not ideas of

* See note p. 346.

† Philosophical Essay, 1810, p. 18.

any operations of our minds whatever; yet we can think of these objects. But, as we have already intimated, the most strenuous defender of our great English philosopher, so far as he is defensible,—and he is so to a very wide and important extent—would not, or ought not at least, to contend for his accuracy in detail. Locke must be estimated by taking into view the time in which he lived—the comparative novelty of his subject as then unfamiliar to English literature, the scholasticism and the crude theories which had prevailed, the infancy of psychological and even of philological criticism which characterized the period in which he received his education. We must judge him by his broad views, strong sense, amazing superiority to reigning and inveterate prejudice—by the general outline and effect of the picture he has given us of the mind of man: in harmony of colouring, and accuracy of finish, he was undoubtedly defective. We cannot wholly defend him, by any means, from the home-thrusts of Reid, the dispassionate, candid, and gentlemanly criticism of Stewart; nor from the microscopic overhauling and the sharp and even cruel dissecting knife of M. Cousin, who has sometimes failed to do him the justice he deserved, partly perhaps from too much love of system; which has led the eclectic chief to identify Locke with a school the speculations of which he would have been the first to recoil from: for the really materialistic philosophers have not hesitated to propound the most unsupported and gratuitous general theories; but who more cautious than Locke?—who knew so well how to prefer doubt and even ignorance to uncertain or pretended knowledge?

That Locke formed an inaccurate estimate of a theory which, in his time, reigned extensively in the philosophical world, the theory of what were by a misnomer termed “Innate Ideas”—that he was not sufficiently informed as to what were really the Cartesian notions on this subject, especially as held by his contemporary Leibnitz, we will not deny: but the “Essay” was the most original, profound, and useful work on its subject, which modern times had ever yet had bequeathed to them. “It was not to be expected,” says the late Professor Young, of Belfast, “that mental science should, like Minerva from the head of Jupiter, spring at once perfect from the lucubrations of one man.” And we apprehend that much as controversy may do towards pointing out untenable theories, and adding greater precision to details, the difficulty which there is in arriving at an unexceptionable nomenclature—in short the ambiguity of *terms* (which, we fear, is next to incurable) will long continue to prove a formidable obstacle to the achievement of an Eclecticism which shall be perfectly satisfactory and unassailable. Sure we are that, at all events, the *spirit* in which Locke set about the task of propounding a philosophy of man’s understanding—his caution

in avoiding the danger of being misled into fine-spun theories by imagination under the guise of reason—his judicious estimate of the limitation of the human faculties—are invaluable lessons to all future inquirers in the same path. Indeed it has often occurred to us that we hardly appreciate the extent to which we are indebted to the writings of Locke on the various subjects which he handled, for the *practical sagacity* which even foreigners are ready to admit characterizes the intelligence of the English, as a nation. We certainly should be sorry to exchange the Baconian spirit and tendency of the "Essay," as a whole, for all the genius which, since the time of Kant, has been lavished, in Germany, on the attempt to seize upon the "absolute" and "unconditioned;" which has always ended like that of the boy who ran to catch the fragment of a rainbow while it was melting away.

We have little space for Locke's details. Indeed to do full justice to him, in regard to his views on the "Human Understanding," it would be necessary to refer, in connexion with the "Essay," at least to his controversy with Stillingfleet, and his examination of Malebranche. It is unfortunate that philosophers should so often misunderstand each other, in consequence of unnecessary laxity of expression on the one hand, or want of patient attention on the other, or both; as though the topics they treat of were not, in themselves, often difficult enough, without being further perplexed by misapprehension of each other's meaning. Descartes had spoken of certain ideas as *innatæ*, and *nées avec moi*. Voltaire, upon this, says, in his "Letters on the English Nation:" "Descartes asserted that the soul, at its coming into the body, is informed with the whole series of metaphysical notions, knowing God, and infinite space, and possessing all abstract ideas." But Descartes repeatedly explained that he "never meant that such ideas had an actual existence, or were distinct from the faculty of thinking."* Elsewhere, he states that all he means by having an innate idea, is "that we have within us a faculty for eliciting it."† Locke evidently misunderstood the true Cartesian theory of innate ideas; and, therefore, in his First Book, he combated what was very much an error of language, which he had magnified into a monstrous and absurd hypothesis. This is evident from Leibnitz's candid admission that Locke's views were, in the final analysis, not incapable of being adjusted to the Cartesian doctrine. Unfortunately Locke died just at the time when Leibnitz was about to publish his *Nouveaux Essais*; in which he closely follows the topics of Locke's Essay, in a dialogue between

* Epist. 99. I.

† Denique cum dicimus ideam ubiquam esse innatam, intelligimus tantum nos habere in nobis facultatem illam eliciendi.—*Responsiones ad Objectiones*.

Philalèthe and Theophile. Had Locke survived, so as to have published a new edition, it is not unlikely that he might, in some important respects, have squared accounts with Leibnitz.* No doubt some of the Cartesians had used unguarded language with respect to the *avoir érroné*; but passages occur in Locke, on this very subject, which might have been penned by either Descartes or Leibnitz.† Leibnitz himself represented Locke as maintaining the well-known scholastic principle: *Nihil est in intellectu quod non fuerit prius in sensu*. Yes, Locke did this in one way, but only in the way in which, as we have seen, it was substantially held even by Kant; and when Leibnitz added *nisi ipse intellectus*, he only expressed what Locke maintained in his doctrine of Reflection; though we do not altogether confess to the admiration with which the new edition of the aphorism has been spoken of in some quarters. If Locke is to be made, as he often is, an offender for a word, it is fair to say of his critic Leibnitz, that he mended the old school-saying rather clumsily; and that, in its new form, it is, as Mr. Lewes has remarked, very much like a man's saying "I have no money in my purse, except my purse itself"—an expression which, we dare say, might often be practically enough understood, though not quite precise for metaphysics. At all events, the amendment had no just bearing on the doctrine of Locke, however it might have hit the sensationalism of Gassendi and Hobbes, or the subsequent ideologism of Condillæ. On the vexed subject of "Innate Ideas," Leibnitz himself, after considering various statements of Locke, ultimately declares, with much more candour than many writers, German, French, or even English of later date:—"I am inclined to believe that, fundamentally, Locke's views on this point are not different from my own."

We have already spoken of M. Cousin as one of the severest critics of Locke; and he is, at the same time, one of the most able. We are convinced, however, that even the materialistic passages and expressions which are too frequently to be found in the "Essay," particularly those which relate to Perception, by no means warrant Cousin in asserting that Locke is to be held responsible for the sensational doctrine of many who succeeded him. Indeed Cousin himself was quite aware that this school omitted one out of the two grand elements of Locke's theory; namely, the doctrine of "Reflection." Yet it must be granted, as appears to us, that no small ingenuity would sometimes be required for the task of defending Locke in a satisfactory manner from Cousin's animadversions. Compromises, palliations, and appeals to

* That this is probable may be gathered from Locke's candid avowal of his openness to conviction. Vid. Book I. chap. ii. § 28.

† E.g., Essay, Book IV. chap. ii. § 13; and chap. xiii. § 3.

to the general tone and aim of the "Essay," are often necessary, to a considerable extent, if the object be to blunt the edge of criticism.

In consequence of the limitation of our space, we have been obliged to content ourselves chiefly with noticing Locke's most fundamental views. Among such are certainly the questions which we have now touched on—Is any knowledge "innate," or rather *intuitive*? Locke decidedly admitted the latter, but he did not make enough of it as a formal element in his system, though it was the real point in dispute between the Cartesians and himself. What are the *sources* of knowledge? Sensation and Reflection; and the latter separates Locke, by a wide interval, from the materialists; and even from Condillac, who, though he reduced all our mental phenomena to sensation, immediate or transformed, was himself an immaterialist. A third inquiry, scarcely less fundamental than those which relate to the general process by which our knowledge is acquired, and its sources, is that which aims to discover what is the analysis of our Knowledge. Locke defines knowledge to be "the perception of the agreement or disagreement of two ideas." In this alone, he says, it consists: "where this perception is, *there* is knowledge; and, where it is not, though we may fancy, guess, or believe, yet we always come short of knowledge." M. Cousin has minutely and rigidly criticized Locke's whole theory of knowledge: indeed, we think that, all things considered, (especially the unsettled state of philosophical terminology in his time—the lax and defective use of terms which was then common, and in which Locke participated,) Cousin's strictures on this whole subject are not free from a degree of hypercriticism, an extreme into which it is easy for a writer to fall who has so much real talent for microscopic dissection, and who moreover seems most at home in a style somewhat diffuse for the nature of the subject. Yet we cannot but admit, with Cousin, that Locke's definition of knowledge is inapplicable to many things which we are always said to *know*. The judgment, "I exist," cannot be brought into the same formula as other propositions—such as those which are arithmetical and geometrical, for example. For when I say *ego sum*, I assume my existence in the subject; and the predicate does not add to my conviction. We must of course admit, with Descartes, (who has beautifully discussed this point in his *Meditations*.) that our knowledge of our own existence is to us the most immediately certain of all things, and is intuitive, neither requiring nor admitting proof; for the *cogito ergo sum* of this distinguished philosopher was never intended by him to be a syllogism, but only a statement of the unassailable fact of consciousness—that it is in the process of thinking that our sense of

self is forced on us.* It may perhaps be doubted after all whether Locke, could he have been interrogated, would not have excepted the intuitive and primary sense of our own existence, which is so identified with thought itself, from what he termed in a more popular and usual signification, *knowledge*, the principle of which, in general, he now proposed to give. Locke seems especially to have had in view our knowledge, as *acquired* by us. Our knowledge of our existence is only so far acquired as it is coeval with the first exercises of thought itself.

With regard to *logical* judgments, we conceive that Locke's definition, in the sense he meant, is substantially correct: for in every logical proposition there is a certain comparison of ideas, each idea being represented by a term; and as these ideas may be regarded as existing in the mind before we unite them in predication, the logical judgment may be said to be formed by the combination of ideas.† Cousin's objections to Locke's theory of knowledge, at least to the analysis which makes it consist in the "agreement or disagreement of ideas," apply only to judgments which we may designate as *psychological* in distinction from those which are logical. Thought itself may be viewed as a *sort of judging*. This is exemplified in all the spontaneous cognitions of the mind, when the actual presentations of perception and imagination produce a realization of the presence of their objects, without any process that can be called logical. In this way, the primitive psychological truth so well exhibited by Descartes, *je pense donc je suis*, is a psychological judgment; and it is no doubt one of those to which Locke's definition will not apply; for self is so presented in our acts of consciousness, from the time at least when the principle of thought has attained a distinct manifestation in the human being, that to know what we mean by *self*, is only to have that sense, impression, feeling, notion (call it what we may) of our own existence, which seems to blend itself with our whole consciousness, from a period too early for us to

* Descartes was charged with a *petitio principii* by Gassendi and others; but, as Spinoza his able commentator has remarked, he only meant to say that our thinking is attended with the conviction of our own existence. Descartes himself has said: "I think, therefore I am, or I exist, is not concluded by force of a syllogism, but as a thing self-evident." *Respons. ad Secund. Object.* Dr. Reid speaks of *Cogito ergo sum* as though designed to be a "logical argument," and seems rather reluctant to let Descartes off guiltless of the enthymeme.

† There is a sense in which even *Cogito ergo sum* might be regarded as a *logical argument*, though Descartes did not propound it as such. It might be thus regarded in opposition to that form of the German Idealism (the absolute form) which reduces everything to a *process of thought*. The strict Hegelian would say "I think," though he renounces all *real* existence. Should any one wish to express the necessity of real existence as the substratum of thought, and not merely that thought is a process synthesized under the term *ego*, he might of course use the enthymeme. But this was not the scope of Locke.

speculate on any genesis which it might be imagined to have. In this case, we may safely say that, psychologically, the subject and predicate are inseparable, if it be at all proper to use this language in reference to such a judgment. We must certainly agree with Cousin, that we did not arrive at the fundamental truth—"I exist," by first perceiving an "agreement" between the idea "*ego*," and the idea "*existence*;" but in a much more summary and immediate way; and, as we have intimated above, we hardly think that Locke himself, however unguardedly he may have expressed his general theory, would have deliberately included under it the judgment in question. We may add that he speaks on the subject of "our knowledge of our own existence," which he pronounces to be intuitive, very much indeed in the strain of Descartes himself.*

The limits of our space have obliged us chiefly to confine ourselves to a few main points, and we can now add little more. Of all the theories of Locke, perhaps that of "Personal Identity" has been regarded as the most singular. It was first criticised, as Sir W. Hamilton informs us, by John Sergeant, a name unknown to the historians of philosophy, till searched out by one of the most learned, laborious, and accurate of them all. Leibnitz, Bishop Butler, Reid, Stewart, Brown, and finally Cousin, have all animadverted on the "strange paradox" that a man is only the "same person so far as his consciousness (memory) reaches backwards." Now we are not about to defend Locke for having left us this whole remarkable discussion in the way in which it occurs in the "Essay;" but we may own ourselves to be somewhat surprised that so very little is said by his critics, in general, with respect to the use which he *professedly* made of the term *person*. By "person," he distinctly states that he did not understand the same material body, or even the same immaterial substance (soul,) nor both combined; he distinctly says that he does not mean by the "same person," the "same man;" so that Reid's elaborate argument, in which he proves (irrefragably enough, no doubt, provided the current sense of the term "person" be adopted,) that if any one had robbed an orchard when a boy, and remembered this act when he became a soldier, but forgot it after he was made a general, though when a general he remembered having become a soldier, he both would be and would not be the same "person" as a general that he was when a boy. Of course Locke would have said—All very true, if by "same person" you mean same man: but nothing can be clearer than that Locke understood "person" in a totally different sense. He lays down for himself the use of it as a "forensic term." In fact the whole discussion relates

* Essay: Book IV. chap. ix.

chiefly to the inquiry—when is a man to be held responsible for his actions, *in foro conscientiæ, in foro humano, in foro divino?* Cousin, in his Lectures on Locke's Philosophy, remarks as follows: "Locke has very clearly seen that where there is neither memory nor consciousness, there can be, for us, no idea of our personal identity; so that the sign, the character, the measure of personality, is consciousness. I cannot render too much praise to this part of Locke's theory: it attains and puts into light the true sign, the true character, the true measure of personality."* . . . Now we apprehend that this was, in substance, what Locke really meant, infelicitously and paradoxically as he may have expressed it. Cousin adds that Locke has "confounded the condition of an idea, with this idea itself." Cousin, however, has not gone, with his usual minuteness, into the criticism of this part of Locke's "Essay;" nor has he specially noticed the "forensic" sense which Locke himself assigned to the term "person." We do not wish to be supposed to have any great fancy for Locke's mode of treating this subject; but we imagine that he meant to express, chiefly, that (in popular phrase) we must have been "*ourselves*," at the time we did any action, in order to have it brought home to us; and that we can only realize, for ourselves, our own past agency, *as our own*, in proportion as we remember it. To enter into any inquiry as to the moral or the legal† bearings of Locke's doctrine, one way or the other, is what we cannot now attempt: we only mean to say that, as so much allowance is due to Locke in other cases in which he has deviated widely from ordinary significations and modes of expression, and has written obscurely, we rather wonder that so very little notice appears to have been taken of certain points, in this discussion, which are essential to a just appreciation of his meaning.

We had intended some further notice of Locke's statements in regard to "Ideas," in general; but we must forbear. Undoubtedly no term has been more vaguely used in psychological speculations; and this is due very much to what we may call the mystery attaching to the operations of consciousness; for every act of it presents at least two elements which are distinguishable—the conscious subject and something of which it is conscious, be the latter what it may—an external influence, an act, or state of mind. We mean that whatever be our theory of perception and of consciousness—be it in harmony

* Cours de l'Histoire de la Philosophie, T. II. Leçon 18.

† The Statute Law has varied, at different times, with respect to the punishment of offences. By the 23rd of Henry VIII., "a man becoming lunatic after an act of treason, shall be liable to be arraigned, tried, and executed." Hale says that: "If a traitor become *non compos* before conviction, he shall not be arraigned: if after conviction, he shall not be executed." (P. C. 10.) Hawkins says the same concerning those who have committed any capital offence.—(P. C. c.)

with what are called common-sense principles, or with the ancient, the Berkleian, or the modern German idealism—in thought, we are conscious, and conscious of *something* as distinct from the consciousness of it; and perhaps this general law may not have been sufficiently appreciated, explain it as we may.

We will only add, that we are glad to see an article, of a popular character, in the last number of the *Edinburgh Review*, which, while it by no means indicates insensibility to the faults of Locke, is characterized by a disposition to do him impartial justice. This, we are obliged to say, has not been done him by some of his own countrymen. With Mr. Lewes, we cannot but regret that Dr. Whewell, for instance, should have repeated the stale but most erroneous allegation that Locke “recognises no source of knowledge except the senses!” It is not surprising that a writer who held views of Locke’s fundamental principle so essentially wrong, should have pronounced that he “owed his authority mainly to the intellectual circumstances of the time;” and that he “by no means possesses such metaphysical acuteness, or such philosophical largeness of view, or such a charm of writing, as to give him the high place he has held in the literature of Europe.”* All who have read the *Nouveaux Essais*, will be aware in how different a tone Locke was spoken of by his most illustrious critic, Leibnitz.

ART. IV.—SPIRITUAL PATHOLOGY; OR, THE AUTO-BIOGRAPHY OF THE INSANE.*

WE published, in one of our earlier numbers, a short article on the “Autobiography of the Insane,” based upon some letters that appeared in the “American Journal of Insanity,” written by persons after having recovered from attacks of insanity. Our attention is again directed to this deeply interesting subject by the perusal of the two works whose titles are given at the bottom of this page. It is not our intention at present to enter at any length into a psychological investigation of the facts recorded by those who have attempted to describe their personal feelings and operations of the mind during paroxysms of mental derangement. The subject is too subtle and too profound to be cursorily discussed. Data of this kind cannot be otherwise than invaluable in the hands of those competent, by psychological study and

* Vide quotation in Mr. Lewes’s *Biographical History of Philosophy*, Vol. III., pp. 180, 219.

† 1. *Autobiography of the Rev. William Walford*. Edited (with a continuation) by the Rev. John Stoughton (of Kensington.) London: Jackson and Walford, St. Paul’s Churchyard.—2. *Memoir of Richard Williams, surgeon: catechist to the Patagonian Missionary Society in Tierra del Fuego*. By James Hamilton, D.D. London: J. Nisbet, 1854.

practical knowledge, to appreciate the phenomena of healthy and morbid mind. It is our intention, therefore, to lay before our readers the salient points contained in the volumes before us, reserving for some other occasion any practical comments that may occur to us in connexion with this important subject.

We do not deem it necessary to detail minutely the facts relating to the early life of Mr. Walford, as recorded in the interesting series of letters published in the volume now under review. We are anxious to confine our attention principally to the psychological portions of Mr. Walford's life, and perhaps, therefore, we may be excused for quoting somewhat in detail his account of his early school-days. We cite the passage with the view of pointing out the grave responsibility incurred by those who undertake the important educational care of the young. The origin of much incurable mental disease may be clearly traced to the badly organised school, and to the criminal and cruel negligence of those whose solemn duty it is to guard the tender minds of the youth placed under their care from vicious habits and moral pollution:—

“The frequent punishments I witnessed in this school, administered often with symptoms of passion amounting almost to fury, terrified me exceedingly at first, but my feelings gradually became less sensitive, till I at length imagined no other means were sufficiently stringent to enforce obedience, and stimulate industry, so that I acquiesced in the propriety of it. This sentiment was very injurious to me, as it greatly strengthened my natural propensity to impatience, and made me too readily susceptible of provocation from imbecility and indolence, an evil to which through life I have been more liable than my conscience and moral sensibility approve. This, however, was far from being the greatest injury I suffered from going to this school. Before that time, I was in a considerable degree ignorant of vice, and unpolluted by its worst seductions, an exemption for which I was indebted to maternal care and guardianship, by the protection afforded to my innocence. As soon as I entered this school, I was very much removed from my mother's inspection, and at no long interval entirely so. Here I came into intimate association with a multitude of boys of all ages, from seven to sixteen.

“Utterly unconscious of the perils to which I was exposed, I easily yielded to the temptations that beset me; and my temper, too susceptible of evil to preserve me from the contagion which surrounded me, quickly rendered me a victim to the abominations that were incessantly before me.

“When reflecting on this part of my history, I cannot avoid deeply feeling the injuries that were inflicted upon me: injuries likely to have spread their pernicious consequences over my whole life, and to have issued in the most fearful results in the life to come.

“I ought undoubtedly, young as I was, to have obeyed the checks of conscience which I occasionally experienced, and to have resisted

the inducements to evil which so fatally beset me : but I cannot avoid censuring the neglect of moral discipline in a case where it was so much needed, and where, though it might not have accomplished all that was desirable, would, without doubt, have proved exceedingly beneficial. The master of the school was a clergyman, consequently a teacher of religion and morals ; but he was little attentive to the discharge of the obligations of this class to which he had voluntarily subjected himself. It was impossible he could be ignorant of the enormities that were perpetrated within reach of his observation, but which he certainly exerted little or no effort to control."

We now proceed to extract from Mr. Walford's letter those portions that refer directly to his own description of his attack of severe mental disease. In Letter XVI., after referring to his resignation of his pastoral charge at Yarmouth, he observes :—

"I have, hitherto, said nothing respecting an insidious malady, by which, from a very early age, I was often very grievously affected, but of the nature and causes of which I was altogether ignorant, though its effects were inexpressibly painful. This malady had shown itself, chiefly, by almost incessant headaches from my infancy, but soon after my settlement in Yarmouth it assumed a new form. I was attacked by paroxysms of despondency, which during their continuance rendered life a burden almost intolerable. I could give no account of the reasons of such disquietude, and was at a loss to devise any probable means of relief. As, however, it was indispensable to try something, I took a journey on horseback for three or four weeks, and rode three or four hundred miles. The daily exercise, and change of scene and object, greatly relieved me, and at my return I had acquired my usual state of spirits and vigour. But after the interval of a few months, gloom and disquietude again overwhelmed me, and I was constrained to try some amusement that might alleviate the distress, and chase away the clouds. Alternate paroxysms and remissions of this description were experienced during the whole of my abode in Yarmouth. With almost every source of happiness open to me, I was often, for months together, more wretched than I can describe. My prospects were darkened by the thickest clouds, all things present and future were encompassed with fear and dread. Taciturnity, irritability of temper, an unnatural and diseased sensibility of conscience, and such a degree of indolent lassitude as rendered every mental occupation distasteful, increased over me, to such a degree, as to alarm me lest the sanity of my mind should be subverted. At times my thoughts were so agitated and my conceptions so disturbed, as to make me apprehensive that some foreign invisible agency was acting upon me ; imaginations of the most extraordinary nature often darted upon me with such rapidity, as left me without control over them.

"I went into company as much as possible, read amusing books, rode much on horseback, but all was in vain ; nothing availed to interrupt or divert my thoughts from the most distressing and perplexing difficulties of speculation, as long as the paroxysms continued to exert

their power over me. Often I wandered about the fields and country, driven from my occupations and my home, by unutterable anguish, lingering in unfrequented lanes, and hanging on gates and stiles, pouring out frantic and broken supplications to God to have mercy on me. Not seldom I was alarmed lest, in spite of myself, I should abandon all religion, and become an infidel or atheist. I dared not disclose to any the condition of my feelings, lest I should be taken for such, or for a madman. My pious, cheerful, and affectionate wife, was but too sensible that some sad cause of disquietude preyed upon me; but for several years, I replied to her anxious inquiries merely, that my spirits were low and depressed, from what cause I knew not. If these torturing paroxysms had not been relieved by frequent intervals, I must necessarily have relinquished my profession, as it was with inexpressible difficulty I performed its duties, while they were forcibly pressing upon me. So extraordinary, however, was my state, that during the intermissions I experienced, I was often cheerful and even gay; I lost sight of my sorrows, and was astonished at myself that I could ever be so painfully affected. This alternation of feeling, altogether unaccountable to me, continued to actuate me through the whole period of my residence in Yarmouth."

Mr. Walford became one of the classical teachers at Homerton College, and of his residence here he writes:—

"During the first years of my abode at Homerton, I enjoyed many remissions, that were greatly aided by our long vacations, and the journeyings for which they afforded opportunity. Though I had no regular and stated obligation of preaching, I yet was employed on the greater proportion of the Sundays, in delivering one, two, and even three discourses, to congregations in London or the adjacent populous villages. These engagements I found were seldom unaccompanied by advantage to myself, as they interrupted the morbid tendency to gloomy thought and painful speculation, which I had no power of otherwise overcoming. They had frequently a still more beneficial effect, in exciting religious affections, under the influence of which I was induced to hope, with a lively expectation, that I should at length be freed, in the possession of immortal life, from all the sorrows and burdens that now oppressed me.

"Such intervals of delight were very transient, and the next day, often the next hour, found me again plunged into the gloom which had become habitual to me. I had to encounter more than the many evils by which, as I have told, I was oppressed when I lived in Yarmouth; and I repeated the same and other expedients that I at that time adopted, with a forlorn hope, that they might work some relief. The great speculative difficulty respecting the origin of the evil by which, as has been intimated, I had been at various times exceedingly distressed and agitated, returned with such a degree of force, that no means I could employ were able to free me from its perpetual intrusion: at home and abroad, in company and in solitude, it haunted and harassed me, left me no power, with any permanency, to direct my thoughts to other topics,

but constrained me to dwell upon it, with scarcely any intermission, at the time when I felt that all my endeavours to solve the mystery were utterly unavailing. No captive loaded with fetters and shut up in the gloom of a dungeon, can more passionately seek for relief than I did, to extricate myself from a bondage which was intolerable. To the anguish occasioned by the incessant occupation of my mind on this one subject, was added a tormenting suspicion, that the Governor of the universe was malevolent, or he would not permit such frightful evils to exist, which he had power at once to terminate. Hence I was involved in never-ending inquiry for some absolute and irrefragable argument in support of the Divine benevolence, as no conception could be fraught with consequences so appalling, as that of irresistible power directed by a disposition to delight in inflicting misery.

"To discover such an argument, I turned over theological and metaphysical volumes of English and Latin writers, more than I am able to enumerate; but the search was vain. If at any time I thought I had grasped a satisfactory theory, my belief in it was evanescent, and it left me helpless as before. I wanted a demonstrative argument; probabilities and moral reasonings appeared to me to be altogether impotent in a case that seemed so flagrant. I exerted my utmost skill to construct a demonstration for myself, but I was unable to succeed. In such a turmoil, the only book that afforded even a temporary relief was Butler's 'Analogy,' to which I continually had recourse whenever I was most heavily oppressed; but the alleviation thus gained speedily forsook me. Besides the incessant agony which was thus inflicted, a morbid restlessness of conscience, which never permitted me to think I made the exertion I might do to promote the welfare, spiritual and temporal, of my fellow-creatures, filled me with most distressing apprehensions respecting the reality of my personal piety, and alarmed me lest I should become subject to the anger of God. Amidst such agitations, tossed as I was from wave to wave of inexpressible distress, I often felt no words could so well describe the horrors of my state as Cowper's lines:—

'Me howling winds drive devious, tempest toss'd,
Sails ript, seams opening wide, and compass lost;
And, day by day, some current's thwarting force
Sets me more distant from a prosperous course.'

To gain some remission of my anguish, I was compelled, when walking or riding alone, to recite mentally verses, English, Latin, or Greek, which I had committed to memory for this purpose,—an expedient not much less annoying than the cogitations that I wished to shun. During many years, I could seldom or never sleep on going to my bed, without adopting this course.

"At length, by the earnest persuasion of a beloved friend, who was, in some degree, acquainted with my disquietudes, I resolved to try what medical aid could do for me; and I applied to a very intelligent and experienced physician for advice, though I augured little advantage from it, as I had a rooted belief that not my body but my mind was in want of healing,—a want not to be redressed by medicine.

"On relating my case as one of extreme dejection, without assigning such particulars as I have detailed, I received a most positive assurance that the malady was derived from the body, and that there was little doubt it would be overcome by suitable curative means.

"No hesitation could exist as to the disinterestedness of the advice, as, on learning from me who I was, the giver of it peremptorily refused any gratuity, and assured me that he should have great pleasure in seeing me, and giving his advice as frequently as I wished. I saw him subsequently many times, always found the greatest kindness and sympathy; but all was, alas! unavailing; as I sunk habitually deeper and more deeply in the slough that on every side environed me. Nothing was now before me but the prospect of being constrained to relinquish my connexion with the College, to abandon all my engagements, and, in obscurity and misery, to await the approach of dissolution, respecting which I entertained the most direful presages.

"In such circumstances, I persisted in pursuing my various occupations, until near the close of my sixteenth year's residence in the College, when, by an unlooked-for and most grievous occurrence, the cup of bitterness, already filled, was made to overflow. My only daughter, of whom I have before made mention as a very engaging, pious, and accomplished child, now about seventeen, met with an accident, which inflicted a wound on the skull, under the effects of which she languished three or four months, when she expired from pressure on the brain, which baffled the exertions of several eminent medical practitioners to relieve. This blow stunned me, in the first surprise occasioned by it: as soon, however, as I could reflect upon it with any degree of calmness, I felt that, deep as was the anguish I suffered from it, it was small compared with that which I experienced from my troubled apprehensions.

"My child was departed from me; yet so contradictory were my feelings, that though my bosom was wrung by alternate paroxysms of doubt akin to atheism, and of imaginations that presented the Governor of the world to me as the adversary, rather than the benefactor and friend of his creatures, I was so awed by the sense of his majesty and wisdom, that, if the lifting up of a finger might have restored to me my much-loved child from the grave, I should have restrained it.

"The influence of the two kinds of distress by which I was affected, differed as much as the causes of it did. My own peculiar suffering never softened my heart, never drew a tear from my eyes,—I was unable to weep, though I often passionately desired to do so: the grief I felt during the time my child was daily sinking to death, and immediately following, vented itself in floods of tears, that seemed to exhaust my whole nature, and render me incapable of repressing them. As soon, however, as 'my dead' was committed to the grave, I resolved instantly to return to the vigorous discharge of my college and other duties, as the surest means of overcoming my sorrows. I went into the lecture-room; but, after one or two attempts, I found resistance vain; and, to change the scene, went into the country to visit a friend, by whose converse I had often been cheered, and of whose sympathy I was fully assured. I should now terminate my narrative if I were not actuated

by a hope that a perusal of what is to follow may afford some support and relief to any of its readers who may suffer from causes similar to those by which I was so long and so grievously afflicted.

"It is generally thought by persons in such circumstances, that their cases are singular and extraordinary; and pious sufferers almost universally ascribe their sorrows to the immediate hand of God, who, as they suppose, has withdrawn his favour from them, and has given them up to the sad consequences of their transgressions. They are also exceedingly prone to believe that their suffering is entirely mental and spiritual, and not at all the effect of bodily disease: while, in many instances, they suppose themselves to be acted upon by a satanic influence.

"Such notions greatly aggravate the anguish which they feel, and dispose them to despair of any permanent relief, either now or hereafter. The instance which I am relating will serve to show that these notions are for the most part either partially or entirely groundless; and that such sufferings are the effects of corporeal disease, and the disordered condition of the nervous constitution. Afflictions of this character, like all others to which mortals are liable, are indeed to be traced ultimately to the will and permission of God Almighty, who for purposes inscrutable by men, suffers them to befall even the wise and good, as well as those of different character. We may and must conclude, that neither good nor evil happen but by his appointment; but we have the surest ground on which to believe that no suffering to which we may be exposed, in the present life, furnishes an indication of God's displeasure in individual cases; and it is the peculiar glory of the religion of Christ, that no living man is warranted to despair of divine mercy and forgiveness, but on the contrary, however deplorable his condition may be, he has God's sure promise that he shall obtain favour if he seek it with sincerity, humility, and perseverance.

"What share in human sufferings of the kind in question is permitted to the invisible and implacable adversary of God and man, I shall not presume to define. Much of what is false and mischievous on this subject may readily be found; but while the fact of satanic agency in the affairs of mankind, is too strongly stated by the sacred writings to admit of question or disbelief, I know of no scriptural rule by the application of which the influence of such agency may be safely discriminated from the action of the mind itself. The only criterion by which the spiritual and heavenly agency exerted in the minds and hearts of true Christians can be determined, exists in the effects which it produces: where the fruits of the Spirit are found, there the presence of the Spirit is manifest; and where the works of darkness are, there we may be sure is the presence of the prince of darkness. In every possible case, one rule is laid down, and one assurance given, 'Resist the devil, and he will flee from you.'

"The most skilful physiologist is entirely ignorant of the manner in which our bodies and minds exert their mutual action on each other; all he knows is that such action takes place; it is therefore no wonder that we should be utterly unacquainted with the process by which

spirits, either heavenly or infernal, exert their respective influences on the souls of men. It is no inconsiderable attainment in divine, as well as human philosophy, calmly to acquiesce within the limits which the feebleness of our faculties assigns to us; and which we can by no exertions pass beyond. How much sorrow should we avoid by such acquiescence! How much of what men call knowledge should we disallow under its guidance!"

Mr. Walford, with the view of mitigating his sufferings, retired after his daughter's death into the country. In describing his feelings at this period he thus writes:—

"You will be able to form some conception of the state in which I was, when I relate the occurrences of the day on which I left home, and arrived at my friend's abode. Everything was prepared for my journey on the preceding evening, and I retired to bed at my usual time, in as tranquil a state as could reasonably be expected in my circumstances. I slept quietly until about five in the morning, when I suddenly awoke, in a condition which I am unable to describe with any exactness. I seemed to myself to be environed by a dense and sulphureous fog or smoke, and was so overcome by horror as to exclaim aloud, that I was ruined and lost, though I had no conception of the cause that induced the frightful apprehension. I continued, however, to exclaim, when my wife, awakened by the outcry, earnestly asked what was the matter? For some time I could reply only by repeating that I was ruined for ever. At length she entreated me to rise and get ready for my journey, which I did, under the influence of these extraordinary and unaccountable feelings. The morning was very cold, which appeared to revive me, so that by the time I was dressed and ready to set out, I was a good deal relieved. I had to travel about eighty miles by coach, and though freed from the notion of being lost, I was during the day in a very excited, yet gloomy and wretched state. The meeting with my friend, and the soothing effect of his company and converse, stilled, in a considerable degree, my perturbed feelings, and I went to bed without any fear of not sleeping.

"I nevertheless passed a sleepless night, and during the twelve succeeding days and nights, in all thirteen, I did not gain a moment's sleep. My nerves seemed to be rigid, and at the utmost tension, and my feelings were hard and unimpressible. I tried the influence of opium one or two nights, in tolerably strong doses, but it produced no effect, and I used it no more. I fully expected I should lose my senses, as it seemed impossible for me to endure the suffering. But I afterwards learned, under the pressure of keener agonies, that no one can estimate the degree of anguish which it is impossible for him to sustain.

"As it was my intention to be absent from home not more than a fortnight, I went to my sleepless bed on the last night of my stay, with the forlorn hope of getting some portion of that soothing anodyne; and as I was to set out at four in the morning, I withdrew very early. No sleep or drowsiness came over me for two or three hours, when a violent

palpitation of the heart banished all expectation of repose, and I desired an apothecary in the neighbourhood to be sent for. When he came, he made the inquiries usual on such occasions, and said he could discern no indications of disease, but, possibly, the liver might be affected; advised an application to a physician, as soon as I could, after my return home; he administered no medicine, but recommended a foot-bath, and left me. Happily the bath answered its intention, and I fell into a profound sleep. I was roused early in the morning, and began my journey homewards, though a good deal depressed.

"The weather was frosty and cold, but when I got out of the coach for breakfast, all my sorrows had vanished; my appetite was good, and my spirits were buoyant, and I got home with an expectation of better times. I spent, however, a sleepless night, though I felt somewhat better than was usual, and met my pupils at the proper time, in the lecture room. As I proceeded with the business, they discovered that I was in great distress, and implored me to desist. I complied, but was never again able to meet them. I had never made any complaints to them, but I learned, after my recovery, that they had long suspected some unknown and great distress was preying upon me. It was the practice of the College, for the whole family to assemble for devotional purposes morning and evening. The morning service was conducted by me, and that of the evening by the students in succession. My prayers, which were always dictated at the moment of delivery, unconsciously to myself led my pupils to this conclusion.

"In compliance with the advice I had received, I called on the day of my return upon a physician, a very kind and long well-known friend; he said then but little, which was chiefly to direct a dose of colocynth to be taken, and promised to visit me as soon as the operation of the colocynth should be ascertained. He came, and said he was quite sure the liver was in perfect health. Having been previously informed respecting my feelings and conceptions of myself, he assured me my complaint was unassailable by any medical treatment; that medical men were wholly ignorant of the causes that were concerned in the production of such maladies, and of any methods of cure. He strenuously advised the cessation of all mental exertion, with the utmost possible avoidance of every disquieting concern; entreated me to abstain entirely from opium, and to consult no medical practitioners, as they could do no good, and might do much injury. His decided opinion was, that the brain had been over-worked, and was now, as he said, taking its revenge by demanding rest. The performance of my duties at the College was now suspended, and, after more than a twelvemonth spent in the vain expectation on my own part, and on that of the supporters of the Institution, that I might resume them at no very distant period, I relinquished my office, and my residence in the College. I retired to a house in Hackney, in which, during the space of rather more than four years, I underwent horrors of which it is impossible for me to convey an adequate conception."

Here Mr. Walford says he would be inclined to bring his narrative

to a conclusion ; but he says he writes with a hope of affording solace and comfort to some fellow-sufferers into whose hands his memoir might haply fall. After stating that he was "induced to make trial of travelling, and visiting several distant places, as Brighton, Nottingham, Birmingham, &c.," he proceeds as follows :—

"Once I set out in company with two beloved friends, for the Lakes of Cumberland, and the southern parts of Scotland, but was unable, through the extreme agitation of both body and mind, to go beyond Northampton, whence I returned home in deep despair of finding relief by any such means. I was persuaded to try what daily short rides in an open carriage, driven by myself, and accompanied by my wife, would do for me. This I soon discontinued, as I became more and more averse to the persons whom we met, and the places through which we passed. I could scarcely endure the sight of strangers ; and the visits of my friends, who called with the intention of consoling me, soon became so irksome as to induce me to secrete myself from them. Several pious friends proposed to me to permit them to hold a meeting for prayer with me, but the proposition excited my alarm to such a degree, that if they had not desisted I should have become frantic and violent.

"I began to shut myself up in solitude, as walking or riding through the streets made me feel as though every one I met was acquainted with my wickedness and misery. I could not endure to look anyone in the face, and ere long, the sight of my own face filled me with fear and aversion, as I considered myself to be wholly a reprobate, forsaken of God and odious to man. This unhappy sentiment originated in an irrepressible notion that I had been unfaithful in the performance of my duty, especially that which was connected with my college residence. Every instance of languor, deficiency, and imperfection which came to my remembrance, was so magnified and exaggerated as to appear of the most criminal and unpardonable nature. Before I left the College, I felt assured that I should not survive the day of its taking place, so that I looked forward to it with inexpressible dread and horror. The conception I entertained of my unfaithfulness became so powerful as to convince me that I had no sort of right to retain the property I possessed, and I even contemplated selling the stock which I had in the funds, that I might in some mode or other make away with it, though I was aware such a measure would reduce me and my family to absolute penury and want. The dread of negotiating this sale and making the transfer, which could not be done but in my presence at the Bank, deterred me ; though I had so much power over myself as to execute a warrant, giving to my wife authority to receive the interest, lest in some reckless hour I should perpetrate so perilous a deed.

"My worthy and most sympathising friend, the Treasurer to the College, to whom I intimated what was passing in my bosom,—for strange as it may appear, I could not restrain myself from divulging nearly all my feelings,—used every expedient he could devise from day to day, to persuade me that all my misery originated in delusion, and

that no greater satisfaction could be felt by all the patrons of the institution, than would result from my return to the office I had holden. But his endeavours were all fruitless, and I continued in hourly dread that I should be reduced to abject poverty, and end my days in a work-house, a prison, a lunatic asylum, or a ditch; and not improbably by my own hands. For many months I suffered from disordered action of the heart, and a remission of pulse, which, whenever I was excited,—and almost every occurrence produced excitement,—occasioned a species of convulsive action, which I thought would suffocate me. Besides which, I appeared to myself to be surrounded with a dense vapour, that prevented me from clearly beholding the objects of vision. My nights were often sleepless, and I was in such constant alarm and trepidation, that I could not allow myself to be left alone for an instant, without uttering cries of agony. In such a condition, a year slowly glided over me. I was not, indeed, at all times equally oppressed, as now and then, chiefly in the latter hours of the day, I was so freed from my gloom and dreary apprehensions, as to feel some measure of cheerfulness, which tempted me to hope for entire deliverance from my grievous bondage; but after many alternations of such feelings, I learned that no reliance on the flattering hope could be exerted, as in a few hours the brightness vanished, and the clouds accumulated as thickly as ever. The morning hours were invariably the worst seasons of the day.

“After the expiration of this first year, all my distressing symptoms increased in strength and continuance: the remissions of which I have just spoken, became less and less frequent; and during the succeeding four years, I was oppressed by unbroken darkness, and tortured by anguish, which I will describe as well as I am able in my next letter, though no words can express with adequate force the terrors through which I passed.

“I am quite at a loss to relate in the order of their occurrence, the truly frightful sufferings to which I was subjected; nor is it either possible or desirable I should recite the half of them. In the course of the first year to which I have adverted, I was disposed incessantly to talk of my feelings, and to weary the members of my family by reiterated complaints. I had habitually no religious feelings, but such as were made up of the keenest anguish, on account of the loss of all those pleasures which I had formerly enjoyed, in exercises of public and private devotion, and of the utter despair in which I was involved, of obtaining the future blessedness which is promised to all the faithful disciples of our Lord Jesus Christ. Sometimes, however, during that period, an unusual excitement to pray would so prevail over me, as to induce me to desire all who might happen to be in the room where I was, in whatever they might be engaged, to kneel while I addressed supplications to Heaven, with an earnestness almost frantic, for some alleviation of my intolerable anguish. After about the period of which I write, these impulses altogether forsook me, and I for days and weeks together used no prayer, unless that now and then a passionate ejaculation would escape from me.

“I now shut myself as much as possible from the observation of any

but my own family, and for two or three years never passed the threshold of the street-door. I abandoned all public and social devotion, as I could not bear it; and thought it vain and useless for my condition, which I felt assured was that of a lost and reprobate wretch. Not unfrequently when called to dinner, I rushed out of the house into the garden, because I could not dare to implore a blessing, or express any thankfulness to God, who had, as I believed, entirely and finally deserted me, and had become my Almighty enemy. Books of every description I ordered to be removed out of my notice, and insisted on the whole of my library being sold, at whatever loss might be incurred, and that was considerable, as I had paid exorbitant prices, on account of the closing of the continent during the French war, for a large number of them, and which were extremely depreciated by the return of peace, which opened a free intercourse with all parts of the world.

"My reason for this procedure was, that books of every kind, especially religious ones, and the Bible in the greatest degree, were associated with remembrances that I would gladly have banished for ever from my mind. I earnestly wished I had never learned to read or write, while at the same time I felt the strongest desire to engage in both, but was driven from them by the morbid sensibility which was so extreme as to be affected by every topic of thought that was presented to me. Similar feelings constrained me to shun the converse of my friends, though I was passionately desirous of their converse. I could compare myself only to a human body, the skin of which having been stripped off, no part can be touched without inflicting agony. This condition at length increased to such a degree, that I could not bear the ordinary conversation of the members of my family, whether they were sad or cheerful. The light of day so distressed me, that I had all my windows blinded: the sun, the moon, and stars filled me with inexpressible dread, and I beheld them as seldom as was possible. All ornamental furniture, especially looking-glasses, was especially offensive to me, and was removed from the apartment in which I lived. My own personal appearance was neglected to the utmost; I should never have shaved myself, or changed my clothing, but for the affectionate remonstrances of my wife; nor could I endure the thought of having new clothes made. For what purpose, I said to myself, should an outcast wretch like me pay any regard to external appearance or ornament? It seemed even shocking to me, and monstrous.

"My irritability of temper was so great, that I fully expected, in some fit of passion, I should murder some of the inmates of my house; and this notion became so strong, that for about two years it was seldom absent from my thoughts; so that I often, in imagination, underwent all the forms of public prosecution; invented speeches I would make at my trial, when I knew I should plead guilty; and endured agonies in this way that could scarcely have been exceeded by reality. During the last four years of my extraordinary wretchedness, I was perpetually haunted by an extreme apprehension that I should destroy myself, in order to get free from the incessant torment I was compelled to endure. I never indeed proceeded to any actual attempt

on my life, though I was very often revolving the different methods of destroying it, and considering which I should choose. My patient wife was sometimes cautioned by her friends to remove from me, as far as possible, the means of destruction; and I was continually telling her of the thoughts that were perpetually present to me. Often I asked if she was not afraid of living with me? but her reply invariably was, 'Not in the least degree.' She knew me too well, and was too confident of God's mercy to herself and to me, she said, to have any such apprehensions.

"The agitation and restlessness that affected me were so great, that I was unable to sit down, as the moment in which I attempted to do so brought an increase of misery; and I was thus kept pacing up and down my parlour from the time of getting up until going to bed. I was so intensely wearied by this incessant going to and fro, as frequently to scream with anguish. In consequence of this painful excitement, I seldom rose from my bed before noon, as I was able to continue this posture without additional pain. As soon as I came down stairs, I hastily swallowed my breakfast, standing, and then the endless movement began. While my body was thus occupied, my mind was the seat of the direst contemplations, revolving the past and the future, until sometimes, when thinking of my pious friends who were no longer living on earth, I loudly bid them an everlasting adieu, as I was never to be admitted to the rest to which they had been conducted, or join in those strains of celestial harmony that resound through the abodes of the blessed and immortal inhabitants, and to which I formerly hoped I should be conducted, when the trial of life should have been surmounted. On such occasions, sighs of distress, so deep from my bosom, would involuntarily escape, as too plainly indicated the profound sorrow that affected me. To this day more than twenty years have passed away, yet I am often surprised by sudden sighing, which, though unassociated with any sentiment of distress, occasions a temporary emotion.

"Through this weary, toilsome, and exerceiating period, my nights were often almost if not quite sleepless. When endeavouring to compose myself to rest, I was often roused to vigilance by convulsive startings, which no sooner ceased, than the most hideous appearances of monstrous face and shape would pass before me, to free myself from which, I was constrained to keep my eyes open, that the real objects about me might dispel those of my disordered imagination. How often did I exclaim, in the words of the suffering patriarch: 'The arrows of the Almighty are within me, the poison whereof drinketh up my spirit. . . . When I say, My bed shall comfort me, my couch shall ease my complaint; then thou scarest me with dreams, and terrifiest me through visions. . . . Thou writest bitter things against me, and makest me to possess the iniquities of my youth.' Amidst these bitter agonies, I was annoyed more than can be imagined by a cause which seems trivial, but was far otherwise. Very often persons, places, and things, would occur to me, the names and particular appearances of which I was unable to recall without long endeavour of a most wearisome kind. I could not remember the name of some one, nor present

to my fancy the faces or forms of various persons or things with which I had been familiar; nor could I banish them from my thoughts, but was constrained to use every method I could devise to bring to my remembrance what I was forced to pursue, until I alighted on the name or object that was suggested to me. Days together was I employed in this fruitless pursuit, without being able to discover what I wanted. Often when found, it would suggest to me something else of the same kind, with similar disquietude, till I felt that the labours of Sisyphus were less fatiguing and useless than those from which I could not escape. My nights were often greatly disturbed by the sudden occurrence of some such things, that suddenly darted on me when nearly asleep, and instantly banished all power of sleep.

“Early in the commencement of the four years to which I am directing attention, a suggestion was made to me by some friend to try some game, as chess, bagatelle, drafts, &c. At first, I rejected the proposal with scorn; but on afterwards conceiving a hope that, perhaps, somewhat of this kind would enable me to sit so much as to avoid the extreme weariness of being always on my feet, I made trial of chess, which succeeded so far as to keep me on a chair. Having made this discovery, I called regularly for the chess-board as soon as I came down stairs in the morning, and insisted that my wife or niece (who lived with us) should play the whole day, until it was time to retire for sleep. In this manner I played thousands of games, sometimes varying the employment by backgammon, &c. Some inconsiderable degree of alleviation was thus obtained during the day. As, however, my companions were compelled at bedtime to withdraw, I was then left alone for hours, as I exceedingly dreaded to go to bed, on account of the sleeplessness and other innumerable disquietudes which I almost invariably had to encounter. I therefore paced up and down the room until midnight, or later. These solitary hours were the most afflicted I was doomed to suffer. Sometimes I was so alarmed lest the anger of God should suddenly fall upon me, and seal my doom, that my limbs trembled with the agitation of my thoughts.

“It would not be difficult to enlarge this relation of misery, but enough has been said to weary me in the recital, and more than enough, I fear, to weary the reader of these dreary pages; I shall, therefore, after observing that these midnight hours were rendered, in some degree, more easy by my finding out that I could play backgammon without a partner, as the game very much depends on the dice, terminate the harrowing detail.

“I must, however, remark that every hope of recovery was long banished from me, and I believe from my friends: this utter prostration of hope aggravated, as much as aggravation was possible, the misery of my condition. Yet recovery at length, though long despaired of, came, and through the great mercy of God, I was rescued from ‘the horrible pit, and the miry clay,’ into which I had seemed to be rapidly sinking.”

This state of mental gloom and despondency was, however, to come

to an end. We will quote in detail Mr. Walford's own account of his extraordinary recovery :—

“The blissful recovery which I experienced was not to be ascribed to any medical process whatever. I had, indeed, much against my own inclination, been so importuned by my friends as to consent, three or four years before my recovery took place, to consult one or two medical advisers ; but the effect proved, as I fully expected, that nothing was to be hoped for from this expedient, and I positively refused to see any other medical persons. About the same time, I was over-persuaded, on account of my general inability to sleep, to keep laudanum by my bedside, and to have recourse to it when sleep was found to be impracticable. I tried this measure two or three times without any sensible effect, and firmly resolved to take no more. I adhered to my purpose, and no other experiments of the kind were ever adopted. A few months before any symptoms of improvement appeared, I now and then prevailed on myself to walk up and down a few hundred yards in the road adjacent to my house, when I was concealed by the darkness of the night from the notice of any who might pass me. Soon after, I went several evenings, when the light of day had departed, into my garden, and paced up and down for some time. On these occasions, I sometimes felt an impulse, during my walks, to pray with deep fervency, that some measure of relief might be afforded to me. These prayers were short and broken, yet I trust they found acceptance in heaven.

“Some weeks or months after these occurrences, an old friend from Suffolk, a most worthy minister, came to see me, and stayed a day or two. I had formerly smoked many a pipe of tobacco in company with my friend, though for the preceding five years I could not bear the sight of a pipe. My wife, aware of his habits, had the materials for smoking set before him, which he employed, and earnestly pressed me to accompany him, which I passionately refused to do. On the evening of his departure, when, as usual, I was the only person sitting up, it occurred to me to try if I could smoke, which four or five years I had discontinued, on account of the manifest bad effects which it produced on my pulse : I instantly procured for myself the smoking apparatus, and found I could perform the operation without the injurious results which had induced me to relinquish the practice. Soon after this experiment, I resolved to try if I could read, though I was under a great difficulty to select a book that did not seem likely to awaken painful associations, and I especially shunned all such as treated of religious subjects. Accident determined my choice. I had not relinquished a Book Society of which I was a member, though the books that came to my house were carefully concealed from my notice. At the time of which I am now writing, I found that a ‘History of the Cotton Manufacture,’ by Mr. Baines, was brought to my house, and as it seemed not very likely that anything in it would excite my feelings, I resolved, though with extreme apprehension, to try this book. In a day or two, I found nothing in it that much distressed me, and I perused it to its close. It amused me, and after reading it again, I wrote out a pretty

extensive abridgment of it. I then attempted a work by Mr. Babbage, the title of which is, I think, 'The Economy of Manufactures.'

"After reading and epitomising these works, I was so much quieted as to regret I had no others of similar character: and I then engaged in writing a translation of the history of Herodotus. Before I had completed my translation of the first book of that history, the spring brought the month of May. My son entreated his mother to take a ride in a carriage with him, and I joined in the entreaty, as I greatly wished she should enjoy some refreshment of this kind. The carriage was brought to the door, when my faithful wife positively refused to go unless I would accompany them. This, I both thought and said, was impossible. She, however, persisted in her refusal; and for some time I warmly remonstrated with her, and urged her going. While I was thus engaged, a sudden inquiry offered itself to me: Why I could not go? I could discover no reason; and calling for my hat, I jumped into the carriage, when I directed the driver to take us to Epping Forest, through Wanstead and Woodford, a ride which, in former years, I had often taken with great pleasure. The verdure of the grass, trees, and country in general, with the fineness of the weather, so affected me, that all my fears, disquietudes, and sorrows vanished as if by a miracle, and I was well,—entirely relieved, and filled with a transport of delight such as I had never before experienced. My hope and confidence in God were restored, and all my dreary expectations of destroying myself or others were entirely forgotten. On my return home from this reviving excursion, every desire to shut myself up and exclude my friends was departed, and I could with difficulty restrain myself from being always abroad.

"This extraordinary change of feeling took place, as I have said, in May; and on the first day of the following August, I set out in company with my son and an active friend, who had before travelled on the continent, for France, Switzerland, and Germany. The delights of that journey were so enhanced by contrast with the events of the five preceding years, that I was in a species of rapture throughout the whole. I felt no apprehensions of danger in going so far from home; and the glorious scenes I witnessed so enchanted me, that my pleasure overflowed the limits of ordinary enjoyment. One only regret was occasioned by the unavoidable necessity, under which my companions in travel were placed, of returning at the end of the month to business; by which I was hurried from scenes of surpassing grandeur and interest, before I had half gratified myself with gazing upon them. Enchanted and fascinated as I was with this tour, I attribute no part of my recovery to it, as I had been entirely freed from my sad condition, both of body and mind, before it took place; if this had not been the case, no wishes of my own, nor any entreaties of my friends, would have had power to persuade me to set out upon it, so deeply was I affected by the remembrance of former disappointments. Immediately after my return, I was seized with a most unexpected and severe diarrhoea, which I thought would terminate my joys and sorrows alike: it yielded, however, to skilful medical treatment, after some days; and one of my

medical attendants, who had long been acquainted with my constitution, assured me when the vehemence of the paroxysms was abated, that the effects of it were far more beneficial than any medical treatment could have produced; and he anticipated a perfect freedom from the return of my distressing nervous disease. This anticipation has been verified by several successive years of established health; and though I am now occasionally in some measure disturbed by some of the minor symptoms of my disorder, for short periods, chiefly during the hours of night, my general health is remarkable for my years; and the condition of my feelings tranquil and cheerful, though seldom much elevated.

"It will not appear surprising that, after the singular and remarkable detail that has been given, I felt a great wish, if possible, to ascertain the cause of nearly fifty years' intense suffering through which I had passed. While, indeed, under the great force of my sorrows, I was evermore induced to regard them as arising from mental and spiritual causes, quite independent of any bodily disease; yet as soon as my recovery was confirmed, I strongly suspected this notion was incorrect, and some recollections of former years led me to the conclusion that it was quite unfounded. My natural temperament had ever appeared to me to be more of the sanguine than the saturnine species, so that whenever I possessed myself sufficiently to consider the case impartially, I imagined that somewhat superinduced, and not native, was the source of my melancholy despondency. I shall therefore briefly mention the occurrences that befell me, and the conclusion from them at which I arrived, by putting them together. My knowledge of physiology is very scanty, so that if my memoir should meet the eye of any proficient in that science, I must crave his candour for what I am about to state relative to my belief of the nature and causes of my complaints. I have what appears to me to be a probable judgment on the whole case, which, however, I do not presume to represent as if it were demonstrated, or as entitling me to impose it on persons who are alone qualified scientifically and religiously to decide respecting it.

"From a very early age—say five or six years from my birth—I was subject to very frequent attacks of headache, which increased in intensity up to about the twenty-second or twenty-third year of my age. At this time I was a student, and my studies were very often seriously affected by this frequency of pain. About this period, my attention was forcibly drawn to an increasing discharge of fetid mucus from one (the left) of my nostrils, which became very offensive to me, and clearly indicated something wrong on the left side of the upper part of the interior of my head. The first surgeon in London was at that time Mr. Cline, to whom I applied for advice. His opinion was that an ulcer had formed in the frontal sinus, which he supposed to be easily curable could it be got at: as this was impracticable, he recommended certain applications of mercury to the nostrils, the vapours of which were to be conveyed by the agency of heat into the head. This practice was tried for some time, but served only to aggravate the symptoms, and was therefore discontinued. Soon after this experiment, I went to Birmingham to visit my friends, when it occurred to me to

consult Dr. Withering, who was then practising as a physician with eminent reputation. He did not coincide with Mr. Cline's opinion, but inquired if I had at any time suffered an injury upon the skull? It had never before occurred to me to reflect on what I had often heard from my mother, that when I was about two years old I had fallen on the edge of a fender, and inflicted a very dangerous wound on my forehead, the scar of which was at that time quite visible. On directing his attention to this mark, he instantly said, there was the origin of my pain; a wound had been produced in the interior of the sinus, which he feared would never be healed, though it was not impossible it might be worn out by the increase of years. He cautioned me against allowing any tampering with it, as it was impossible to do good, and injury might be inflicted. He advised the application of leeches, whenever the pain might be very troublesome; and recommended me to take snuff plentifully, as the means of stimulating the secretion of mucus, in order to assist the escape of the purulent matter that was ever forming, and was the chief cause of the headaches from which I suffered.

"This advice appeared to me to be wise and good, and I immediately acted upon it, with great ultimate though not immediate benefit, as my headaches continued without material diminution for perhaps four or five years. Soon after I went to reside in Yarmouth, which was when I was on the point of thirty years of age, I experienced the first serious attacks of the malady, the growth and termination of which have been described in the last letters, and need not therefore be repeated. After the first of these paroxysms of despondency took place, I gradually perceived the headaches by which I had been so long afflicted were almost imperceptibly becoming less frequent and intense, while the symptoms of dejection increased in about the same proportion. These changes were so slowly effected as to elude much observation at the time of their occurrence, though I subsequently became painfully conscious of them, in the great increase of my mental suffering, and the almost entire cessation of the hemiplegia, or partially local headache. After my recovery, when often reflecting on the course of suffering through which I had passed, it occurred to me that the headaches and the mental depressions were the results of one common cause—the injury inflicted on my head in infancy. I conceived that the headaches were the effects of the injury, so long as the consequences of it were confined to the sinus exterior to the brain; and that the mental suffering, which by slow degrees succeeded to the decreasing pains of the head, and finally displaced them, was caused by what medical men technically term *metastasis*, or a transference of the effects of the injury from the external sinus to the interior of the cranium, and these so affected the brain and the nervous system that is dependent on it, as to produce the grievous sorrows of which I was for almost sixty years the subject.

"The conception now stated is entirely my own, and if it be incorrect, the incorrectness belongs only to myself, and I have set it down as a probable reason for attributing many of what are called nervous

diseases to injuries immediately or remotely affecting the brain and the nervous system, in a greater or less degree, though I hope and believe, in few instances so pregnant with intense and durable wretchedness as that from which I was mercifully delivered. My notion, which I have briefly developed, of the origin of my malady, derives some confirmation from the observation made to me by Dr. Withering, which I have noticed, that possibly the effect of my early injury might be outgrown by advancing years. Such, I imagine, is the probable reason of my sudden and almost instant recovery : the cause was exhausted, and the effect ceased."

When referring in another portion of his autobiography to his restoration to health, Mr. Walford, when speaking of the probable physical cause of his attack of mental depression, observes :—

"Ignorant, prejudiced, and irreligious men are frequently guilty of ascribing such a derangement as that which I have described, to false conceptions of the nature of religion, and the extravagances of heated and fanatical imaginations—the results of puritanical or methodistic representations of Christianity. By such means they endeavour to discredit all serious and spiritual piety, and to justify their own careless and wicked disregard of it. In the instance which this memoir offers to observation, it is plain and undeniable that the dejection, melancholy, and excited apprehensions of misery, present and future, would have agitated any individual whatever, religious or irreligious, who should have suffered from physical injury a similar disturbance of nervous and mental health. The specific objects on which the morbid influence is exerted will vary, according to the several predominant characteristics of the persons affected by it: irreligious men are as liable to such injuries, and the natural effects of them, as any of directly opposite and contrary character; but the special effects will differ, just as the individual habits, mental and moral, differ from each other. A bad man may be the victim of nervous derangement, but his dejection will not be associated with anguish arising from his apprehension that he has lost the favour of God, together with the forfeiture of all the pure and heavenly delights which his dependence on God, and his converse with him, were wont to impart: his distress may be very great, but it will have no relation to his exclusion from the 'spirits of just men made perfect,' and a final separation from his friends whom he had loved on account of their sympathy in holy affections, and in converse with whom he had been expecting a friendship more perfect and an intercourse more blissful than can be enjoyed in this mortal and transient state. Other fears, apprehensions, and terrors will engage his thoughts and agitate his bosom, according to the strength and virulence of his perturbed imagination, but they cannot be imputed to either his supposed or actual piety, as he is possessed of neither."

Mr. Walford's recovery was not, however, a permanent one. The Rev. Mr. Stoughton, in his continuation of the memoir, says :—

"On the 21st of December, 1849, the Editor received from his revered and beloved friend a note—the last he ever sent to him—containing an invitation in the following terms, which show the feelings with which he anticipated the birthday that proved his last:—

"‘If I am permitted to live until the 9th of January next, I shall have completed my seventy-seventh year; and I write for the purpose of saying that I hope you and Mrs. Stoughton will come and dine with me on that day, and spend as many more days and nights with us as you can afford. You will not, I hope, allow anything, if possible, to prevent my having this pleasure, as I cannot look for returns of that day without presumption.’

"The invitation was gladly accepted, and the day thus spent with him was one of unusual gratification. Infirmary seemed to have but slightly touched his vigorous constitution, while age had not at all impaired the energy of his strong intellect, or cooled the ardour of his domestic and social affections. His conversation was, as ever, intelligent and sensible, and indicated that his mind was in a state of placid enjoyment. It was interesting to see his manly and venerable form, seated at the fireside of his library, surrounded by his favourite authors, to listen to reminiscences of old times, and to remarks, pronounced in no undecided tone, on various topics, theological and literary, and to witness the beaming forth of that unaffectedly genial spirit which always crowned his simple, but generous and hearty hospitalities. Old age with a matured mind and a mellowed heart is always beautiful. It resembles a tree tinted with autumnal hues of glorious richness, and reflecting from its leaves the brilliant rays of sunset. A charm of precious holy power invests it, which whoso feeleth not hath a dry and withered soul. The subject of these recollections was a choice specimen of such old age, and rarely was it seen in a better light than on that last birthday.

"A few weeks after this, intelligence of an alarming kind respecting him was received by his friends in town. He had become seriously indisposed, and in connexion with very considerable physical disease, some plain symptoms of his old melancholy had made their appearance. But after a little while there was a marked improvement. Health, bodily and mental, seemed as if they would be entirely restored. During a visit paid to him by the writer, Mr. Walford expressed the alarming apprehensions he had felt lest his previous sad visitation should return in unmitigated force. And then with touching simplicity, while his eyes were full of tears, and his lips quivered with irrepressible emotion, he adverted to the efforts he had used to quell his dark forebodings by a humble and believing application of the Gospel to his own case.

"‘I can only rest,’ said he, ‘on the most general assurances of the divine mercy; declarations which include all are alone such as I can believe include me. ‘If *any man* sin, we have an advocate with the Father, Jesus Christ, the righteous: and he is the propitiation for our sins: and not for ours only, but also for the sins of the whole world.’ That is *general* enough. It gives me hope.’

"After repeated references to this encouraging topic, he resumed his wonted love of conversation, discussing several theological and critical questions with unabated interest; and as some references happened to be made to popular methods of representing truth by the aid of imagery and illustration, he observed that such modes, though at times very important, desirable, and even necessary, could never yield satisfaction to a mind of his habits, desiring as he did to get below the outward covering and drapery of truth, to investigate its essential nature, and to form clear, definite, and abstract views of its substance and soul.

"The impression left by the interview was highly encouraging, and it was fervently hoped that the last clouds of eventide had broken and would vanish, and that the going down of the sun would be a scene of glory. But the hope was soon checked. Tidings of relapse, fearful relapse, succeeded. Another visit was paid, and how different was the scene in the quiet little study at Uxbridge from that witnessed only a few weeks before! How very different from the cheerful birthday scene! Disease had manifestly been at work. The form had shrunk; the face was haggard; the sunken eye indicated despondency. He made an affectionate acknowledgment of his friend's kindness in coming to visit him, but expressed himself as no longer entitled to the pleasures of friendship, no longer worthy of esteem and regard. Books, which he had so much valued, he declared were now a torment to his sight. Philosophy, his favourite pursuit, he denounced as a word he could not endure. Incessant restlessness would not allow him to remain in his chair for a minute, but he was ever pacing his study with perturbed emotion. It was night, dark, starless night, with that soul that had once been so bright and sunny. All efforts made to administer consolation were instantly repelled, and he dwelt with agonizing earnestness upon his state of mind, which he described in terms characteristic of his usual correct and exact habit of expression, but swelling out sometimes into bursts of unwonted eloquence—the eloquence of despair. It was plain that with the recurrence of physical disease had come the dense morbid melancholy of bygone years.

"It was a painful task for those who watched him to see with what power the malady operated on his mind; not merely beclouding his thoughts with regard to religion, but, as in the former case, producing strange ideas and fears with regard to his circumstances. Yet, amidst his mysterious hallucinations there came now and then, especially once, a lucid space in which disease gave way, and Christian faith and hope burst forth."

Continuing the narrative, his biographer observes:—

"A third visit paid by the writer was scarcely less mournful than the second. The bed-room, to which disease and infirmity now confined Mr. Walford, so-darkened, by his express direction, as scarcely to leave his features visible, was but as a sign and symbol of the mental state of the venerated and much-loved sufferer. With perverse acuteness he parried off all arguments of consolation, and obstinately averred that

while his distress twenty years before was the effect of disease, his present sorrow was independent of such a cause. His explanations of the former visitation were repeated, but in vain. His pertinacious refusal of all comfort was, however, but too plain a proof of the renewed and entire ascendancy of that same insidious morbid influence which had previously been such a destroyer of his peace. Still it was hoped that a time of joy would return. Anxiously did his affectionate niece, who resided with him, and his not less affectionate daughter-in-law, who spent the last few weeks under his roof, watch and wait for such a happy season, even as the watchman waiteth for the morning: but in this world it never came. The paroxysms of anguish, indeed, abated; he spoke less and less of his sorrow, and sunk down into a state of silence, if not torpor. Days and nights gloomily rolled on, so different from their 'tranquil gliding' which he frequently described in his letters and other papers; but it was the happy confidence of his friends, notwithstanding his own fears, that the angry billow, no less than the gentle wave, was bearing his weather-beaten bark to the better land. That land he reached on the 22nd of June, 1850. The poor body looked truly like a wreck; but the eye of Christian faith could see the soul, which had often had such hard work to pilot the unmanageable vessel, safe beyond the reach of storms and the return of night, on the shores of the heavenly country."

We copy for the perusal of those who are interested in this case, the account given in the appendix of the *post mortem* examination of Mr. Walford. It is as follows:—

"Examination of the body of the Rev. William Walford, on the 27th June, 1850, the fifth day after his decease:—

"No remarkable external appearance; there was more fat over the whole body than could have been expected, when his long illness and great abstinence from food are considered. On opening the head, the dura mater was found so firmly attached to the bone at two points, as to be incapable of separation without being torn. Those two points were—one near the superior and anterior angle of the right parietal bone, the other at the superior and posterior angle of the left parietal bone: they were marked on the internal surface of the bones by deep depressions having a sort of honeycombed appearance, but not carious. The outer table of the skull alone remained at these parts, and its thickness scarcely exceeded stout letter-paper; the size of both depressions was nearly the same—about an inch long by three-fourths of an inch in breadth. The colour of the brain under the first point was different from all its surrounding surface; it had assumed a green tinge similar to long-retained pus: this did not extend more than a quarter of an inch into the substance of the brain. There was no discoloration of the brain at the second point, nor was there elevation of the surface at either: the depressions in the bone were from thickening of the dura mater in those specified localities. The dura mater throughout its whole extent had lost much of its proper vascularity, and assumed a

thickened yellow, leathery appearance. Over the whole surface of the brain there was considerable serous effusion: the ventricles were full of water—there were no signs of recent inflammatory action, but there were several points of unnatural adhesion of the membranes, denoting former existence of an inflammatory state. The lungs were sound throughout, but had large adhesive bands at various parts, the consequence of inflammation at some remote time. There were several ounces of water in both sides of the chest.

“The heart was large, flabby, and covered with a good deal of fat, especially at the base. It contained no blood—it was strongly adherent to the pericardium over the whole space corresponding to the left ventricle, the evident effect of inflammation at some former time. The valves of the heart were sound; the aorta was fully one-half larger than natural, and at its origin from the heart, was an almost continuous circle of ossification. The whole inner surface of the left ventricle and of the arch of the aorta had a deep red colour, like inflammation, but there were no enlarged capillary vessels to be seen. The pericardium contained about an ounce of water. All the abdominal viscera were in a healthy condition.

“DAN. MACNAMARA, Surgeon, }
WILLIAM RAYNER, Surgeon, } Uxbridge.”

We now proceed to direct the attention of our readers to another work presenting many points of deep psychological interest. In the memoir of Mr. Richard Williams, surgeon, who officiated as catechist to the Patagonian Missionary Society in Tierra Del Fuego, we have the details of an extraordinary mental attack, during which this gentleman is said to “have undergone marked spiritual changes.” We subjoin Mr. Williams’ narrative of the singular illness which issued in what is termed, “his conversion.”

“I bless God that ever I was afflicted. Not only do I date my conversion from my illness, but I believe that this illness was designed for my conversion. It was a seizure more remarkable than any of which I remember to have heard or read; and, apart from the inward working of the mind, it presented a series of extraordinary symptoms, which seem to defy solution. Myself a medical man, and for many years accustomed to witness disease in every form, I have been able to explain, to some extent at least, almost every case; but for the cause of my own illness, and for the explanation of its strange symptoms, my knowledge and means of judging fall far short. But whether mere natural causes occasioned all the bodily sensations or not, scarcely signifies: the mental changes, I am fully assured, were altogether the work of God.

“At the very outset, I should acknowledge that I had no previous belief in the truth of Christianity. I viewed it sometimes in one light, sometimes in another. I regarded it, for the most part, as an absurdity. At its many votaries I wondered, and their understandings I looked down upon as strangely deluded. I could not comprehend how a God should die, nor even bring my mind to admit that an atonement was

necessary. The works of infidels, however, I always read with dissatisfaction or disgust; and any scurrilous attack on the faith of others I should have been ready to oppose. But into the truth of the matter I never thought of inquiring; and, as far as my perusal of it went, the Bible was a mere lumber-book. Science, literature, and my profession, were my whole delight; but the truth or falsehood of Christianity I felt it no part of my business to examine.

"Of natural religion I had something in my heart. Many a time have I lifted my eyes from nature up to nature's God, and have adored his excellency as revealed in his beautiful and magnificent works. I knew myself to be a creature sprung from God; but I never dreamed that I was a creature accursed before him. I knew God to be infinitely just; but I never feared that that justice would consign me to eternal misery. I knew that I oftentimes acted contrary to my conscience; but I believed that intellectual enlightenment and the mere force of reasoning could carry human nature to perfection, and place it far above the control of passion. I deified human nature as capable of transcendent virtue, and absolutely denied its innate corruption. I hoped that the soul was immortal, but could never feel convinced that it was so; but as to everlasting torments,—I viewed the doctrine as sacrilege, and a defamation of the justice of God. The existence of a devil I believed no more than any other bugbear.

"The only instances when confidence in my own opinions has been altogether shaken, were, I well remember, moments when, without an assignable reason, I have awakened from sleep, and an indescribable awe and terror have seized on my soul, filling it with undefined apprehensions of the future.*

"Such is a slight picture of my state of mind previous to my illness.

* "To such lucid moments does Jane Taylor refer, in lines not the less poetical because of their simple truthfulness:—

'And yet, amid the hurry, toil, and strife,
The claims, the urgencies, the whirl of life,—
The soul—perhaps in silence of the night—
Has flashes, transient intervals of light;
When things to come, without a shade of doubt,
In terrible reality stand out.
Those lucid moments suddenly present
A glance of truth, as though the heavens were rent;
And through that chasm of pure celestial light,
The future breaks upon the startled sight;
Life's vain pursuits, and Time's advancing pace,
Appear with death-bed clearness, face to face;
And Immortality's expanse sublime,
In just proportion to the speck of time:
While death, uprising from the silent shades,
Shews his dark outline ere the vision fades;
In strong relief against the blazing sky
Appears the shadow as it passes by.
And though o'erwhelming to the dazzled brain,
These are the moments when the mind is sane;
For then, a hope in heaven—the Saviour's cross,
Seem what they are, and all things else but dross.'

Essays in Rhyme."

Up to the moment when it seized me, I had been engaged in the active duties of my profession. I had visited many patients, and during the evening had felt fatigued and languid, and anxious to seat myself comfortably in my arm-chair. A little after ten o'clock I saw the last of the persons waiting for me, and instantly I felt myself severely unwell. I went up-stairs, and threw myself on my bed. In a few minutes I felt inexpressibly ill. The first sensation was an amazing weight on the chest, with difficulty of respiration; the carotids of my throat striking like hammers on my head, and a feeling as though torrents of air were rushing into my brain, and the head were itself expanding. The agony became insupportable, and I knocked for some one to come to me. Meanwhile my mind acquired a wonderful vivacity. Thought upon thought came pouring in with a distinctness of apprehension, enlargement of view, and faithfulness of memory, such as I never before experienced. A power to comprehend my personal identity, and to understand my relation to time and eternity, was wonderfully given me. The passing moment seemed without beginning or end. I felt as though immortal faculties, immortal relations, were beginning to be recognised. The thought began to stagger me, that the hand of death was grasping the cords of life. With the thought, darkness—thick, palpable darkness—gathered on my soul. A mountain load seemed to crush my breast. It was girt as with bands of iron. My heart felt too big for its wonted space. A horror of anguish filled my whole being. Unnumbered sins sprang up before my astonished conscience, and Death in his terror rose up to my gaze. Look where I would, there was no hope. One wide, unbounded ocean of dismay and terror, lashed with tempestuous howlings, roared on every side; and the thought of an offended God pierced my soul with madness and despair.

"In this state I lay for hours. Meanwhile my sister, alarmed by my knocking, had come and found me speechless. Others of my friends were sent for; then medical attendance. Recourse was had to remedial measures; but I still grew worse. The night passed, and the morning found me the same. A painfully vivid consciousness of everything going on around me added greatly to my distress. The first faint glimmer of light that broke into my soul was when the name of Jesus was uttered. With the very thought of that name the hope of mercy was allied, and like a drowning man I clung to that hope. In the agony of my soul I called upon that name; and in the meanwhile, finding that one of God's servants (Mr. M., senior) had entered the room, I felt a new hope, as if the very presence of a man of God was a source of safety. He bade me look to Jesus. With the very bidding I felt an infinite joy in so doing. Faith in that holy name rapidly gained the ascendant. My darkness was turned into light, and in a short time I felt a sweet sense of the pardoning mercy of God. After this I grew better and better, and all my symptoms remitted, till I felt nothing except the languor resulting from the violence of my previous sufferings.

"Towards the evening, however, a relapse took place, with phenomena essentially different. Beginning with the same contraction of the chest

as before, there followed tetanic spasms—a violent jerking of the upper part of the body from side to side, interrupted by quiet intervals, sometimes by a complete rigidity of the neck and spine. So sensitive was I to touch, or to the impression of a breath of air, that the approach of any one evincing an intention to disturb me would throw me into convulsions; and, suspecting tetanus or hydrophobia, the three medical attendants inquired whether I had been bitten by a dog, or had sustained any mechanical injury. With short intermissions, this state of things lasted for successive days, till my strength was nearly exhausted. Towards the close of the fourth day, and during the succeeding night, my eyes were upturned in their sockets; I retained not the slightest power of voluntary breathing; I was incapable of speech; and the attempt to swallow a drop of water brought on spasms which threatened suffocation.

“During all this period I was possessed of perfect consciousness; nor had I any pain. The only painful sensation was the impossibility of resisting the convulsive movements of my body, and the fearful constriction of my chest. At first I was, as it were, a mere spectator and observer of the symptoms—thinking, and even reasoning upon them; and when abstracted from their consideration, I felt that I could calmly meditate on God’s mercies. I had no painful conflicts about my state, but a settled serenity—a tranquillity for which I could scarcely account, unless from the conviction that my salvation was sure. But during the last night of this stage, I experienced wonderful evidence of a world to come. My friends were assembled at various distances around my bed. The curtains were drawn, and a candle yielded its obscure rays. I heard the sobbings of my relations. I knew that they looked on my life as fast fleeting. I was myself convinced that I should not recover. I had pictured my body carried to the grave, and had marked in my mind’s eye all the attendant circumstances. Mentally I had taken leave of earth, and I lay in perfect peace, assured of my salvation. A dead silence now reigned around; and as I waited the moment of my final change, it was an intense and deeply absorbing thought that soon the great scene would be revealed. Whilst lying thus, I thought I heard a gentle knocking. My soul started in expectation. Inwardly I exclaimed, ‘I come, Lord Jesus!’ Relapsing into quietude, I felt all but dismissed. It had the effect of so far arousing me, that I got power to speak, and called to my kindred, who came around me in surprise and anticipation. I took leave of them. I told one to be watchful, and spoke to the others, till power of speech again forsook me. As I lay I drew my hand to my breast to examine its beatings. I felt they were small and weak, and I was content, for I should soon be in another world. I was even anxious to die; for I feared lest, living again, I might lose what now seemed so sure. Then it was that a new order of feelings came over me. I had the most extraordinary sense of the bodily presence of the Power of Darkness standing by the side of my bed; not that I imagined that I saw anything, but I felt as if I could have put my hand on the very spot where he stood, and I shrank from that side with horror and loathing. But,

blessed be God! on the opposite side stood, equally revealed to my spiritual senses, the Power unto Salvation, the very embodiment of love; and to this I turned as to a refuge. I shrank from the Evil One, and poured out my prayers to Christ, whose protection was evident to me. Thus I lay, when, all of a sudden, the most brilliant light darted into the room, and filled me with astonishment. Now, I thought, the time is surely at hand. God is visibly making manifest his approach. Quickly will the angels of God be descending, and I shall behold my Redeemer. By the vigour thus imparted I was enabled to sit up in bed, and with a feeling like that which Lazarus might have experienced, conscious of a supernatural Presence, I called out to my friends, 'Did you not see the light?' Next minute the impression came over me that I was yet to live; and at the same time, inspired with the certainty of knowing what I ought to take, I told my assistant to bring me forty drops of the tincture of opium, and twenty drops of the muriated tincture of iron, and to repeat the dose every twenty minutes. After taking the first dose, I continued sitting in bed; feeling as though entranced; and what is singular, my arms, when extended at an early part of the evening, had remained so, evincing the cataleptic state. I took the second dose, and lay down. These doses, so large that my assistant afterwards wondered what could have possessed him to give them, were the means of my recovery. After a miserable interval, during which the body seemed to be sinking into corruption, and the mind itself seemed to have lost all power of joy or sorrow, hope or fear, a profound sleep closed my eyes. It lasted upwards of twelve hours, and, awaking as from a dream, there remained no trace of my former state, except extreme debility. I never had the slightest relapse, but made rapid progress in recovery."

Dr. James Hamilton, the editor of this memoir, when commenting upon the preceding narrative, observes that there are

"One or two circumstances of which an ordinary spectator may possibly judge as accurately as the patient himself, with all his professional training.

"For instance, it was at the close of a laborious day, and when excessively fatigued, that Mr. Williams was first seized with those singular sensations in his head, and with the brilliant accompanying ideas. Now, to say nothing of any intermediate cause, such as determination of blood to the brain, we know that excessive application or exhaustion is not unfrequently followed by similar odd sensations. Dr. Moore mentions Dr. Isaac Watts, who, after great exertion of mind, thought his head too large to allow him to pass out at the study door; as also the case of a gentleman who, after delivering a lecture at the College of Surgeons, said that his head felt as if it filled the room.* With Mr. Williams the sensation was 'as though torrents of air were rushing into his brain, and the head itself expanding.' Nor do we

* The Power of the Soul over the Body. By George Moore, M.D. Fourth edition, p. 264.

suppose that it is at all uncommon for nervous exhaustion to be followed by such cataleptic seizures as Mr. Williams experienced, when his eyes were fixed, and when he had lost the power of speech, as well as voluntary respiration. The 'inspired certainty' with which he prescribed for himself the tonic opiate, need not surprise us. Suggested by some constitutional craving, invalids often fancy that if they could only obtain a given antidote, they would instantly be well. And they frequently are right. Sometimes the specific is a strange one, and would not readily have occurred to a man of science. In the present instance we presume that science would have countersigned the patient's prescription, had it only known all the circumstances; but then it must be remembered that in the present instance the patient himself was a doctor.

"Intense mental conceptions so strongly impressed upon the mind as, for the moment, to be believed to have a real existence, are amongst the most frequent spectral illusions.* As coming near this class, we must regard that 'extraordinary sense of the bodily presence of the Power of Darkness standing by the side of his bed,' which filled the imagination of the patient towards the close of his illness, as well as the brilliant light which followed. To bystanders no light was visible, no presence was palpable. Unlike the voice and the light on the road to Damascus, which the spectators heard and saw, these manifestations were confined to the individual's own mind.

"Still these ideas were substantially correct. Disease might embody them in forms too material; and yet they were truths. It was true that sins unnumbered stood chargeable against one who had hitherto lived without God in the world. It was true that God was offended, and death was coming. It was true that boundless dismay and terror environed the Christless transgressor. The name of Jesus had no more effect in tranquillizing the conscience and kindling hope than that blessed name should ever have. And the instinct which shrank from the Power of Darkness and cried to Jesus for protection, was itself a token that a new life was dawning. There might be nervous excitement, but there was also a spiritual awakening. There might be morbid sensations; but the pervading conviction was scriptural, and the consequent change of thought and feeling was permanent. That change we shall leave Mr. Williams to describe.

"It was on the fifteenth day of September 1846 that I was taken ill. It is now September 1847 when I am writing this. The delightful feelings of the first few days of convalescence I remember well. Joyfully exulting in the interposition of Divine Providence and mercy, which had brought me out of thick darkness into the glorious light of truth, O what a heaven flitted through my soul! Holiness with its celestial gilding seemed to tinge every object around me. The world was no longer the same world; its people no longer the same beings. Myself and my fellows I no longer regarded as creatures of a moment's duration, but I saw eternity impressed as a seal on the whole generation

* See Hibbert on Apparitions. Abercrombie on the Intellectual Powers, Part 3.

of men. The universe was no longer a confused assemblage of indistinct parts, moving towards a gloomy terminus, but, as far as the Divine purposes were concerned, a bright whole of uniform perfection, and the entire expanse filled with love, unbounded love. God himself seemed to move everywhere. All was joy to my soul. I looked on myself as a brand plucked from the burning, and rejoiced in the sure hope of salvation. Jesus was most precious to me,—my glory and infinite joy. The Bible, hitherto a sealed book, was now a river to my thirsty soul. I was astounded at its contents. As I turned over its pages, wonder upon wonder ravished my delighted heart. I felt that I would care to live only for the sake of reading it. It was a glorious light. At times its heavenly rays would subdue me into a mellow and peaceful benignity; at others, rouse me into ecstatic bliss. Everywhere was the authority, the love, of God recognised. Its power to command my obedience was as the thunder-clad arm of Omnipotence; and its pleadings for holiness were as the gentle whisperings of love, to which my heart, my mind, my soul answered assent. How I wondered at my former darkness! How amazed did I feel that the precious light had so long shone in my way, and I never had perceived it! I resolved to make it the absolute rule of my life.

“These first days were as though they had been a foretaste of heavenly peace. Never shall I forget my first mortification at finding that sin still existed within me. There had been no actual committal of an offence that my conscience charged me with; yet a sudden and unexpected change had come over me. There was a cloudiness in my mind; my faith was dim; my heart had ceased to exult. It was as though all had been a bright and glorious dream, and I had now awakened to the stern realities of a cold and miserable world. Alas, the bitterness of that moment! I strove to recall my hopes—they seemed delusion. I read my Bible—the bright revealing light which had heretofore almost made the very print more clear was gone; and, although I still knew it to be the Word of God, the page had ceased to enkindle rapture or inspire emotion. I knew not how to account for this state. I had believed that the work of change and renovation had been completed, at least carried to so high a degree that it was impossible I could wilfully sin against God again. I abhorred the thought, yet here I was in darkness, and sin palpably abounding in my heart. How sad was the sight of myself! It was the first glimpse at the inherent corruption and original depravity of my heart. It was the first of a series of painful but important lessons which convinced me that God had only hitherto instructed me in the first principles, and laid the foundation for my faith; but that the work of grace had to be carried on, and an absolute change of heart effected, by many a severe and fiery ordeal.

“In the course of weeks, I was enabled to take a trip into North Wales; here my connexion with the world was first re-established. All the avocations of man, that were apart from his religious duties, appeared to me to have vanity legibly stamped on them. On my route I stopped a short time in Liverpool, but the bustle and commotion ex-

cited no pleasurable sympathy, for I felt that it was all vanity. The whirl, the din, the confusion, all told me of the world's spirit, and in the countenance of the busy throng I could not read one expression in unison with my own feelings, or which came home to my heart. At Beaumaris I abode at a commercial hotel, and there, in the presence of the usual visitants of an inn, I took out my Bible, glorying in the thought that I was thus unfurling Christ's banner. One of the company entered into conversation, and boasted of his religious acquisitions, and of the high position he held in the church to which he belonged as teacher and deacon. But gradually he drank to inebriation. I was glad to find a room to myself, and in dejection to ponder over this first instance of a false professor.

“My stay in North Wales, especially my visit to Llanberis and Snowdon, afforded my mind the healthful occupation of contemplating and adoring God as revealed in his works. To me the God of nature and the God of revelation now were one, and I began more sensibly to feel the relation wherein we stand to God by the conjoint link of creation and redemption. How glorious to know that a pathway had been opened for the rebellious sinner to the favour of the great Eternal, whose hand had formed the mighty fabric of the universe, and who had given the being and life we enjoy, but from whom I had so long been severed, and to whom I had never felt my relation, nor acknowledged my obedience! But the great Eternal was now the Lord my God, and I, the creature of his hand, could, through the Redeemer, look up and believe that the Power which guided the planets in their course would direct me in all my ways, and preserve me by his providential care. I felt that he had first loved me. I felt that God so loved the world as to give his only begotten Son, that whosoever believeth in him should not perish, but have everlasting life. I felt that it is the First and the Last who there expresses his care for all the family of man, including myself, a worm so insignificant. At that merey I could only wonder and adore, and, with faint conceptions of his love and grace, I could but humble myself before him.”

We place upon record the preceding extracts from the two volumes referred to, as matter for future psychological analysis and comment. They cannot prove otherwise than of deep interest to all engaged in the study of medical-psychology.

ART. V.—ON CRIMINAL LUNACY.*

WITHIN the last few years the public, professional, and legislative attention has been particularly directed to the question of criminal lunacy. In connexion with this subject, several valuable pamphlets have lately been published. We refer specially to the interesting *brochures*

* Suggestions for the Future Provision of Criminal Lunatics. By W. Charles Hood, M.D., Resident Superintendent Physician of Bethlehem Hospital. London: Churchill. One vol. 8vo, 1854.

of Drs. Wood and Bucknill, reviewed in previous numbers of this journal. The most recent work on the subject is that now under our critical consideration. Dr. Hood, from the great attention he has paid to this matter, and from the position he occupies as the resident physician of one of the largest and most important public asylums in this country, is admirably qualified to offer suggestions in reference to the future treatment of criminal lunatics.

Dr. Hood's work displays great research, and considerable literary ability. We propose placing before our readers a short analysis of his labours. We regret that our space will not admit of our quoting more at length from this valuable publication. When speaking of the warrants for criminal lunatics, Dr. Hood observes :—

“Here it may be well to explain that insane criminals are sent to lunatic asylums under two descriptions of warrant,—viz., the royal warrant, executed by command of the reigning sovereign, and a warrant signed by one of the principal Secretaries of State. If a jury acquit a person charged with treason on account of insanity, or a person indicted for any offence be found, upon arraignment, insane, the Act 39 & 40 Geo. III., c. 94, provides that ‘the court before whom such trial shall be had shall order such person in strict custody, in such place and in such manner as to the court shall seem fit, until his Majesty’s pleasure shall be known; and it shall, therefore, be lawful for his Majesty to give such order for the safe custody of such person, during his pleasure, in such place and in such manner as to his Majesty shall seem fit.’ This Act appears to have been suggested by a difficulty which occurred upon the trial of Hadfield, who remained for many years an inmate in Bethlehem Hospital, and there died in the year 1849. After the very memorable speech which was delivered on that occasion by Lord Erskine—a speech unrivalled for the beauty of its language, the dignity of its style, and the perspicuity of its argument; the insanity of the unfortunate man was so clearly demonstrated, that Lord Kenyon, presiding as Chief Justice, stopped the case, and directed the jury to return a verdict of ‘not guilty;’ but then arose the question, how the prisoner was to be disposed of? ‘For his own sake,’ said Lord Kenyon, ‘and for the sake of society at large, he must not be discharged, for this is a case which concerns every man of every station, from the King upon the throne to the beggar at the gate—people of both sexes and all ages may, in an unfortunate frantic hour, fall a sacrifice to this man, who is not under the guidance of sound reason, and, therefore, it is absolutely necessary, for the safety of society, that he should be properly disposed of, all mercy and humanity being shown to the unfortunate creature; but, for the sake of the community, he must somehow or other be taken care of, with all the attention and all the relief that can be afforded him.’ Hereupon, the counsel for the Crown, and the counsel for the defendant, agreed that the safety of the community required that he should be taken care of. ‘It is laid down in some books,’ said the former (Sir John Mitford, afterwards Lord Redesdale),

‘that by the common law, the judges of every court are competent to direct the confinement of a person under such circumstances.’—‘That may be, Mr. Attorney-General,’ interposed Lord Kenyon, ‘but, at present, we can only remand him to the confinement he came from; but means will be used to confine him otherwise in a manner much better adapted to his situation.’ It was then suggested by Mr. Garrow (afterwards a Baron of the Exchequer), that ‘it would be for the benefit of posterity if the jury would state in their verdict the grounds upon which they gave it,—viz., that they acquit the prisoner of this charge, he appearing to them to have been under the influence of insanity at the time the act was committed. There would then,’ he added, ‘be a legal and sufficient reason for his confinement.’ This recommendation was adopted by the jury, who returned a verdict in these terms. Thus originated the form of verdict now commonly returned in cases of this description.”

Dr. Hood then directs the attention of his readers to the cases of Margaret Nicholson, and Frith,—cases that led to some important modifications of the criminal law. He says, that in

“August 8th, 1786, after Margaret Nicholson had attempted to assassinate George III. with a knife, having approached his Majesty’s person under the pretext of delivering a petition, she was taken into custody, and afterwards examined at Whitehall by the Lords of the Privy Council. Upon the evidence of Dr. John and Dr. Thomas Monro, she was found insane. It was proposed to commit her to Tothill-fields prison, but this was objected to, upon the ground that she was a State prisoner; ‘in consequence, therefore, of the determination’ of the Privy Council, it is stated that ‘the unhappy woman was conveyed to a cell prepared for her in Bethlehem.’

“In the January of 1790, another lunatic, named John Frith, attempted to assault his Majesty by throwing a stone at the royal carriage, as his Majesty was going in state to the House of Peers. This man, who was obviously insane, did not meet with so much clemency as Margaret Nicholson, for after undergoing several examinations at the Treasury Office, Whitehall, by the Attorney-General, in the presence of the principal Ministers of State, he was committed to Newgate, and there imprisoned nearly two years. It was not until the 11th of December, 1791, that he was put to the bar, charged with committing high treason by throwing a stone at his Majesty. The affidavits of a physician and surgeon were produced, stating that they had attended the prisoner since his confinement, and had examined into the state of his mind, and found him insane. The Attorney-General said he had seen the affidavits, and was convinced of the truth of them: and had authority to inform the court that he was in possession of the King’s sign manual, by which his Majesty consented to the prisoner being discharged from the gaol of Newgate, upon condition that security was given that he should be confined in some proper place as a lunatic, or in some other manner taken care of, so as to answer his Majesty’s most

gracious intentions. Bail was accordingly produced, and the prisoner ordered to be liberated.

"These cases, and the subsequent one of Hadfield, showed clearly the necessity for some further legislation on the subject, and accordingly, the trial of Hadfield having taken place on the 26th June, 1800, a few days afterwards, on the 30th June, the Attorney-General, in the House of Commons, moved for leave to bring in 'The Treason Bill, and the Insane Offenders' Bill.' The object of the 'Treason Bill' was to give the life of the Sovereign the same protection as the law afforded to the meanest subject of the realm; for previous to the passing of this statute, it was necessary, on an indictment for high treason, even where the life of the Sovereign had been openly attempted, to prove the overt act by two witnesses; and a number of forms were provided by the old law, which were salutary and proper in cases where the charge wore a political aspect; where the treason consisted in an alleged rebellious conspiracy, or might be considered in the nature of constructive treason; or where the prosecutor might have an interest in bringing home the charge to the person accused: but where the life of the Sovereign was attempted by a simple act perpetrated in the face of the public, the facilities for conducting the prosecution were embarrassed, and the trial could not be conducted in the same way as if the party indicted were a common subject. The 'Treason Bill,' therefore, provided that, in cases where a person was indicted for the assassination of the King, or any direct attempt against his life, the offender shall be tried in the same manner as if charged with murder; but be punishable, if convicted, by execution as in other cases of high treason."

Chapter II. of Dr. Hood's volume is devoted to the investigation of the "statistics of insanity," and Chapter III. to the consideration of the "statistics of criminal lunacy." The question of general statistics, discussed in the former chapter, is deserving of much attention. Dr. Hood clearly demonstrates the want of precise and accurate statistical data, in reference to insanity, and points out with great force the discrepancy of opinions existing among those who have attempted to elucidate this intricate subject. Dr. Hood, as the result of his investigation, deduces the following inferences:—

"*First*—That insanity is a disease which, making every allowance for the increase of the population, has been greatly on the increase.

"*Second*—That insanity is more prevalent in some counties than it is in other counties, and predominates more in agricultural districts than in towns.

"*Third*—That insanity, in proportion to the population of the two classes, prevails to a greater extent among paupers than among persons belonging to the middle and upper classes of society.

"*Fourth*—That the number of females afflicted with insanity, making allowance for the excess of the female population, is greater than the number of males."

The chapter on the "statistics of criminal lunacy" is replete with valuable tabular matter. The following are the author's results:—

"Proportion of the Insane to the number of Commitments	1 to 920
Proportion of the Insane to the number of Convictions	1 to 684
Annual average of Offenders found Insane	29

"Hence it appears, that during fifteen years, from 1838 to 1852 inclusive, there were 408,617 offenders committed for trial, of whom 301,977 were convicted, 106,199 acquitted, and 441 detained as insane, 204 having been found insane on arraignment, and 237 having been acquitted on the plea of insanity. Furthermore, we may observe by these tables, that the annual average number of commitments in each of the fifty-two counties of England and Wales was, during this period, 7858, and the annual average number of offenders found insane on arraignment, or acquitted on the plea of insanity, in each county, was 8.25.

* * * * *

"The greatest number of criminal lunatics, during a period of fifteen years, belonged to the second class of offenders—those charged with committing offences against property, without violence; 156 having been accused of larceny, of whom 87 were found insane upon arraignment, and 69 acquitted upon the plea of insanity. It has been generally assumed that the majority of criminal lunatics commit the higher offences included in the first class,—those against the person; murder, attempts to murder, manslaughter, &c.; but this appears to be an error. Of the above, 108 were accused of murder, of whom 33 were found insane upon arraignment, and 75 acquitted upon the plea of insanity; 32 were indicted for attempts to murder, of whom 15 were found insane upon arraignment, and 17 acquitted on the plea of insanity. Furthermore, 27 were indicted for stabbing and wounding with intent to maim and disfigure, of whom 13 were found insane on arraignment, and 14 acquitted as being insane. Lastly, 10 were committed for manslaughter, of whom 5 were found insane upon arraignment, and 5 acquitted upon the plea of insanity."

Among the numerous suggestions that have been made for the future treatment of criminal lunatics, it has been proposed that one great central or state asylum should be erected for their common reception. The author, however, entertains serious objections to this proposal. He thinks great evils would result from congregating all the criminal lunatics of the country under one roof. He asks, whether it would be fair or humane to incarcerate a lady or a gentleman who may, under a momentary insane impulse, have committed a trivial misdemeanour, in the same ward, or even in the same establishment, with women or men belonging to the lowest classes of society, who may have committed revolting and nameless offences? We must confess that we do not see how this obvious objection can be answered. We do not conceive it to be practicable in the present state of society

to have two distinct classes of state asylums for criminal lunatics,—one being for the reception of criminal ladies and gentlemen, and the other persons connected with the middle and lower classes of society. Dr. Hood justly remarks:—

“There is no family in the kingdom—from the domestic circle of the highest peer of the realm down to that of the humblest peasant—that may not be stricken with the calamity of insanity; and a very trivial transgression may render the afflicted person amenable to trial in a public court of justice. Acquitted as being insane, is the hapless offender—who may be highly connected, well-educated, and habitually sensitive and refined,—to be cast among coarse and ruthless ruffians, whose hands—insane as they may have been when they committed such offences—have been tainted with the most atrocious and loathsome crimes? The object of the legislature is to restrain, not to punish, these unfortunate beings.”

Would not the establishment of a state lunatic asylum for the centralization of all criminal lunatics materially interfere with the great and humane object of the Legislature, as propounded in the Act of Geo. II., c. 5, s. 17, which affirms that “they (criminal lunatics) shall be kept, maintained, and CURED?”

If lunatics were only permitted to associate with each other, would not the chances of their recovery be materially diminished, and the designs of the Legislature be frustrated? Dr. Hood raises other objections to the proposal. He says, very justly—

“In whatever county the proposed central asylum be erected, the relations and friends of the afflicted, living in remote places, would have to travel a great distance to visit them;—an inconvenience which would press heavily on the poorer classes, who would probably have to perform the journey on foot, losing many days’ work in the performance of a filial, or it may be, a parental duty. This grievance, which would be undoubtedly incurred, merits consideration. Again: the concentration of evil-doers, insane or sane—more especially those afflicted with any disease, bodily or mental—is notoriously impolitic; and it may fairly be predicted that such an asylum would soon assume the character of a prison rather than that of a curative hospital. It would be regarded in the light of a bastille, and would be, however well conducted, desecrated by no slight amount of popular odium. Already a great prejudice exists in the public mind against all lunatic asylums; the result of which is, that many families are reluctant to place their immediate relations under proper medical treatment in the early and curative stages of the malady. To this cause may be ascribed, in some measure, the increase of insanity; for were other diseases in their incipient stages equally neglected, there can be no doubt that the bills of mortality, in respect to them, would be very greatly augmented.”

Our author, considering that sufficient attention has not been paid

to the classification of criminal lunatics, suggests, that those who have committed the higher class of offences—murder, treason, sedition, &c., who are prosecuted and supported as State prisoners at the expense of the Government, should, under a Queen's warrant, be confined in Bethlehem Hospital; but that insane persons, guilty of minor offences, might, under a warrant of the Secretary of State, be sent to their respective county asylums,—the parishes to which they belong being liable for the expense of their maintenance:—

“Were these suggestions adopted, there would be no fear of the accommodation for criminal lunatics becoming exhausted; and the burden of supporting them—dispersed over different counties—would be fairly equalised. The resident superintendents would soon become familiar with the history of every case, the peculiar features of the malady, and the temper and disposition of such persons; and, taking every circumstance into consideration, would be best qualified to determine the most eligible way of classifying them in the asylum. Some might be permitted with impunity, and even advantage, to associate with the inmates generally; others, on the contrary, it might be necessary to confine entirely to the criminal ward and airing-court connected with it. To suppose that some part of a great county asylum cannot be appropriated to such a purpose, and rendered sufficiently secure to guarantee the safe custody of any class of dangerous lunatics, appears to me unaccountable. And, after all, when thus distributed, the number of criminal lunatics which would be sent to each county asylum would be very few; and whatever may have been their offences, they ought to be treated with as much consideration as ordinary patients. Many of these cases, indeed, professionally considered, are extremely interesting to the physician engaged in this department of medical practice. Besides which, as regards their moral management, it is well known that criminal lunatics—the designation of whom as criminals excites so much apprehension—are often the most quiet, docile, and inoffensive persons in these establishments. My experience upon this point accords with that of Dr. Bucknill, who has, in his ‘Inquiry,’ published a series of cases, to which he ‘confidently refers as proof, that the most criminally disposed lunatics are not the so-called criminal lunatics, and that the majority of the latter are as tractable and harmless as the average of insane persons to whom the stigma of crime has never been attached.’”

Dr. Hood dwells upon the importance, in a curative, as well as in a financial point of view, of compelling persons confined as criminal lunatics to occupy themselves in some kind of productive employments consonant with their former habits and stations of life, having a due regard to the capacities, physical and mental, of the patients whose strength should not, for the sake of any pecuniary advantage which the institution may derive, be overtaxed:—

“Under any circumstances, whatever system of moral management

be adopted in the treatment of criminal lunatics, it should be characterised by the greatest possible amount of kindness and benevolence. They are a class, owing to the *tristesse* of their position, more sensitive, more susceptible, and more excitable than ordinary patients, and many of them endure more mental suffering. It is impossible to imagine the sad thoughts and painful associations which may, with the returning light of reason, or during a lucid interval, recur to the mind of these afflicted persons, who may be fully conscious, and bitterly lament the wrong which they may recollect having committed. Many who are partially recovered become victims of melancholia—*‘Io! vaga tristis Orestes!’* It was suggested by Horace himself, that the most atrocious crimes which were invented by the genius of heathen fiction might be exculpated upon the plea of insanity.

“An tu reris eum occisâ insannisse parente,
Ac non antè malis dementem actum Furiis, quàm
In matris jugulo ferrum tepefecit acutum?
Quin, ex quo est, habitus malè tutæ mentis Orestes,
Nil sanè fecit quod tu reprêndere possis.”*

“The liberation of criminal lunatics upon recovery, suggests a very serious and difficult subject for consideration, inasmuch as the greatest possible precaution should be taken that the safety of the public shall not be endangered by their being prematurely discharged.”

When referring to the many popular prejudices that prevail with regard to the treatment and condition of criminal lunatics, Dr. Hood alludes to the prevalent opinion, that many such patients are detained in Bethlehem Hospital, and other lunatic asylums, for long periods after they have sufficiently recovered, and are safe to be at large. Hadfield's case has been cited as an illustration of the fact. We subjoin the following interesting particulars of this criminal's case:—

“Upon inquiring into the history of Hadfield, it will be found, that although he had a perfect recollection of every incident connected with his attempt upon the life of George III., and described with much enthusiasm the zeal with which the illustrious Erskine pleaded his defence, expressing the utmost gratitude towards him for his extraordinary exertions upon that memorable occasion; yet, in the recital itself of every trifling detail, he evinced a morbid pleasure not consonant with an exactly sane state of mind. He used to relate with much vivacity and self-satisfaction an anecdote which occurred at the doors of the theatre, which he considered an excellent joke. In consequence of his Majesty's expected visit, an immense concourse of people had assembled round the pit doors of the theatre, and when they were thrown open, the crowd made a prodigious rush—as might be supposed—into the

* “Do you imagine that Orestes grew mad after the parricide, and was not distracted and haunted by execrable Furies before he warmed the pointed dagger in his mother's blood? *Nay, from the time that you supposed him out of his senses, he really did nothing that you can blame.*” This curious passage occurs, Sat. 3, Book ii., L. 134, *et seq.* Matthias Gesner subjoins the following note—“*Furor non fuit pœna parricidii sed causa.*” Edinburgh. Ed. 1806. P. 377.

house, in the midst of which a young woman, immediately behind Hadfield, cried out, 'Oh, sir! the handle of your umbrella is running into my breast.' 'But'—Hadfield was wont to add, laughing—'the handle of my umbrella was the butt end of the pistol!'

"There can be no doubt that this man was a very dangerous lunatic, his homicidal propensities having been excited by religious delusions, which were suggested to his mind by another lunatic, who was a cobbler, named Bannister Truelock. It is impossible to account for the extravagance even of insane delusions. Hadfield imagined that he was to be God, and the cobbler Truelock, Satan, and that a happy change would then take place throughout the world. This millennium, Truelock persuaded Hadfield, would be hastened by the death of the reigning Sovereign, and the deluded man forthwith furnished himself with a pistol to accomplish the projected deed. It should be remembered, however, that Hadfield, before this regicidal attempt, had betrayed the most inveterate homicidal propensities. One night he seized his own child—a boy of eight years of age—with the resolution of dashing his brains out, which he was prevented doing by the forcible interposition of the mother; and on several occasions he threatened to murder his wife. In a work entitled 'Sketches of Bedlam,' I find it stated that 'Hadfield was confined, as a maniac, in the old Bethlem, where during his stay he killed a poor maniac named Benjamin Swain, by a stroke over his head, which tumbled him over a form, and he died instantly. He contrived to make his escape from old Bethlem, but was apprehended at Dover, and for his better security was sent to Newgate, where he remained until the 8th November, 1816, when he was brought here.' As far as the apparent rationality of Hadfield was concerned, it cannot be received as any criterion of his sanity—or accepted as evidence that the homicidal propensity was at an end and would never recur; he was, from the observations reported to me, by no means considered safe by those who watched him; he was often morose and sullen, gave way to gusts of passion and sudden impulses, which, bearing in mind his previous history, rendered him, in my opinion, a very unfit subject for liberation."

In conclusion, whilst directing the particular attention of our readers to this interesting and able addition to British psychological literature, we quote a recapitulation of the author's principal suggestions in reference to the future provision of criminal lunatics:—

"*First*—That in the distribution of criminal lunatics a principle of classification should be recognised, and that the highest class of offenders should, under the Queen's warrant, be confined, either in Bethlehem or in some other recognised State asylum.

"*Second*—That criminal lunatics who have committed offences of a minor description, should be confined under the Secretary of State's warrant in the county asylums which are established in the counties to which they respectively belong.

"*Third*—That—for the reasons above assigned—it being inexpedient to erect a central lunatic asylum, every county asylum should be re-

quired to provide a special ward and airing court in connexion with it, where the safe custody of this class of patients shall be insured.

"*Fourth*—That the association of criminal lunatics with other patients must depend upon circumstances, which should be left to the discretion of the superintendent or medical officer of the asylum, whose reasons for allowing such association should in every case be submitted to the Commissioners in Lunacy for their consideration and approval.

"*Fifth*—That convicts becoming insane in prisons should not be sent to county asylums, but that a criminal ward, or some other appropriate place, in connexion with the infirmary of the prison, should be appointed for the confinement of such patients, who should be placed under the immediate charge of the medical officer of the prison, and there remain under his treatment until the term of their imprisonment has expired, a report of the case being at the same time forwarded to the Commissioners in Lunacy, to be by them transmitted to the Secretary of State.

"*Sixth*—That criminal lunatics, when received into lunatic asylums by the warrant of the Secretary of State, should be placed under the *immediate* jurisdiction of the Commissioners in Lunacy, who should be empowered to require periodical reports from the superintendents and medical officers of such asylums respecting their bodily and mental state of health. Furthermore, that the Commissioners in Lunacy should be empowered to take measures for the discharge of such criminal lunatics as recover their reason, whether by reporting their state of sanity to the Secretary of State, or otherwise; and that they should have the entire control over the classification and general management of this class of patients."

LETTSONIAN LECTURES.

No. III.

ON MEDICO-LEGAL EVIDENCE IN CASES OF INSANITY.

Delivered before the Medical Society of London.

By FORBES WINSLOW, M.D., D.C.L.

I HAVE selected for my third and concluding Lecture a subject of great, vast, and of daily increasing magnitude and importance, not only if viewed in relation to our position as citizens of the state, privileged to live under the protection of a monarchical government and a constitutional sovereign, but as members of an honourable and learned profession, exercising—rightly, justly, and advantageously exercising—an incalculable degree of moral influence through all sections of society, and all departments of art, science, and philosophy. Is it possible to over-estimate or to exaggerate the interest of the subject now under consideration? I propose to submit to your critical judgment a sketch of our high and responsible vocation as medico-legal witnesses—to suggest for adoption certain general principles of evidence, which may serve as our guide when called upon to give testimony in difficult, doubtful, and disputed cases of insanity. The position of the medical witness, even under the most favourable circumstances, is perplexing, anxious, and embarrassing. The character of his education, the peculiarity of his habits of thought, the philosophic cast of his mind, his constant and earnest search after truth, the nature of his daily professional occupation, ill adapt him for contending in the forensic arena with the knowledge, ability, and subtle acumen which are so often brought to bear (in courts of justice) against those little skilled in the art of legal fence. Occasionally we have to give testimony in relation to matters of *fact*; to describe *physical* states—phenomena cognizant to sense. For example: in cases of sudden death from supposed poisoning, the toxicologist has certain well-defined scientific data to guide him to a right conclusion; he is in possession of well-recognised tests, which bring him almost uner-

ringly to a sound and safe deduction ; his evidence has reference more to an *exact*, than to a speculative—to a certain, than an uncertain science ; his province (when in court) is simply to record the results at which, after careful investigation, he has arrived. The questions involved in the inquiry, whether death, under suspicious circumstances, was natural, self-inflicted, or the effect of extraneous violence, are not *necessarily* intricate, obscure, or difficult of satisfactory solution. How different, however, is the position of the witness, when his mind is brought to the consideration of questions connected with morbid mental phenomena ? In these exalted inquiries he has no fixed or certain test—no infallible standard—no well-defined rules—no principles of exact science, to aid him ; no beacon to protect him from the rocks and quicksands which beset his course—no chart to refer to in times of difficulty—no compass to guide him in the hour of danger—no harbour of refuge into which he can run his fragile vessel when the tempest is howling and destruction impending. As medico-legal witnesses, the obstacles with which we have to contend are often of a grave and serious character. We have to deal with phenomena, of the essence or intimate nature of which we know absolutely—positively, nothing. It is our duty to elucidate principles of belief—to unravel motives of action—to explain erratic conduct the most anomalous and extraordinary ; we have to trace the line which separates passion—the subtle and shifting transformations of wild, ungovernable, and impetuous passion—from the excitement of mania, and the morbid emotions incident to the minor forms of diseased mind ; to sketch the varying frontier, the nice and shadowy distinctions, which separate lunacy from malignity—madness from brutality ; to point out where folly merges into mental derangement—where *responsibility* terminates, and *irresponsibility* commences ; to distinguish between *eccentricity* and *insanity*—*crime* and alienation of mind—*vice* and *mental derangement*—between the delusions of the lunatic and the false conclusions—the illogical deductions—the unphilosophical reasoning of men of sound intellect and of rational understanding,—to separate the normal rhapsodies of the healthy imagination, and the Arcadian illusions of the poet, from those *morbid* conceptions of the fancy—those

——— “ Daggers of the mind—false creations
Proceeding from the heat-oppressed brain”—

those "thick-coming fancies," the products—the well-recognised, indisputable symptoms of a mind thrown off its healthy balance by *actual cerebral disease*.

There is no possibility of our placing the diseased mental elements submitted to our critical examination in a psychological crucible or test-tube; we cannot avail ourselves, in these delicate investigations, of the aid of the microscope; there is no mode by which we can penetrate behind the curtain, or tear aside the veil that divides the *material* from the *immaterial*—*mind* from *matter*; there is no possibility of our obtaining access to that mysterious chamber where the spiritual portion of our nature is elaborated; we have no gauge, no square rule, by which we can ascertain in all cases, with any approach to chemical or mathematical accuracy, an accurate idea of the actual condition of the mind, when apparently under a cloud. In the elucidation of these points, we are in a great measure left to our unaided mental sense—to the uncertain guidance of our own deceptive experience, and alas! often, fallible judgment.

We enter the witness-box, charged, under the solemn sanction of an oath, to decide the important questions as to the legal and moral responsibility of our fellow-men. In capital cases, we are called upon to declare whether the criminal was or was not insane when he committed the act; whether, by disordered mind, he was reduced to a state of legal irresponsibility. In other cases, equally important matters are submitted to our adjudication, involving points relative to the competency of persons to make testamentary dispositions of their property, or manage, during life, themselves and their affairs. In the former case, the life of a fellow-creature is made contingent upon the evidence of those deputed to examine him, and delegated with the responsibility of recording their medico-legal opinion as to his state of mind; in the latter instance, we are expected to depose to the competency of certain persons to exercise the otherwise inalienable privilege of disposing of property agreeably to their own notions of the law of inheritance and conceptions of what is just; and, in the third case, it is our province to decide, not upon the solemn question of life or death, but whether a fellow-citizen is in a condition of mind to justify the law in alienating from him his *civil rights*, depriving him of the control of his person and affairs, and destroying, by a legal declaration of lunacy, his free

and independent agency. In the first case, it is our imperative duty to avert, if possible, *actual* death—a death of *moral* ignominy and of *physical* suffering; in the latter instance, it is left for us to pronounce whether legal dissolution is to be recorded against the party whose mind is the subject of medico-judicial inquiry. In the former case, it may, happily, be in our power to rescue a fellow-creature from the scaffold; and, in the latter instance, we may, by our evidence, have the not less pleasing gratification of shielding him from the expensive, but nevertheless, under proper circumstances, humane guardianship of the Court of Chancery.

Under circumstances like those I have now cursorily sketched, we have, as may readily be conceived, to contend with serious impediments. The witness has to encounter the prejudices and ignorance of those by whom he is surrounded—of those who, if otherwise enlightened, are too disposed to forget that the mental conditions relative to which he has to speak are the exceptions to the general laws by which human nature is guided, and that they can only be elucidated by facts of an extraordinary character, which rarely present themselves in the state of society in which an individual exists. In attempting to give the court before which he is subpoenaed a lucid statement of his opinion, based upon actual experience, long-continued observation, reflection, and patient study, the views thus expounded are too often considered either as the offspring of a false philosophy—a mawkish sensibility—a distorted science—the affectation of a learned and metaphysical subtlety—or, alas! as the sordid result of the paltry *honorarium* awarded to him for the expression of his professional opinion! The medical witness has to encounter the sarcastic doubts, the special pleading, the suspicious inuendoes, the legal finesse, of the acute and accomplished advocate, always on the alert to perplex and confound him; he has also arrayed against him the unbending dicta of the judge, and inexperience of the jury, easily misled by the plausible appeals, the persuasive eloquence, and *ad captandum* arguments of the counsel, who, occasionally, in the discharge of his duty as an advocate,* considers

* Lord Brougham, in his celebrated speech on Queen Caroline's trial, thus describes the duty of an advocate:—"An Advocate, by the sacred duty of his connexion with his client, knows, in the discharge of that office, but one person in the world—that client, and none other. To save that client by all expedient means—to protect that client at all hazards and costs to all others, and among others, to himself, is the highest and most

himself justified, whilst defending the interests of his client, to combat truth by sophistry—to dumb-found, confuse, and entrap the witness—dazzle and bewilder the judge—hoodwink the jury, and, by a combination of qualities which the accomplished *nisi prius* advocate and practised disputant is so competent to call into successful operation, make the “worse appear the better reason,” pervert the ends of truth, and thus make what ought to be revered as the TEMPLE OF JUSTICE, and held sacred as the MAJESTY OF THE LAW, a mockery and a jest.*

Having referred to the peculiar position of the medico-legal witness, I would direct attention briefly to the value—special and peculiar value—of the testimony of those who have directed their attention almost exclusively to the study of medical psychology, and who, by patient investigation and long experience, have obtained a practical insight into the characteristics of the varied phenomena of mental alienation, the habits and peculiarities of the insane, and who are therefore peculiarly fitted to give evidence in these cases.

Questions of great difficulty and complexity often arise in the course of important judicial investigations, involving matters of science, upon which the judge, jury, and counsel are incompetent, from actual want of knowledge, to form a sound and accurate

unquestioned of his duties; and he must not regard the alarm, the suffering, the torment, the destruction, which he may bring upon others. Nay, separating even the duties of a patriot from those of an advocate, he must go on reckless of consequences, if his fate should unhappily be to involve his country in confusion!”—(Oct. 3, 1820.)

* “Addresses to a court of justice or a judicial body by a paid advocate, although they tend to a practical conclusion, do not fall under the head of *deliberative oratory*. The advice is not given upon the personal security, credit, and authority of the speaker, nor is he understood to speak his own convictions, but merely to follow his instructions, and to present the facts of the case and the application of the law to it, in the light most favourable to his client. Hence a paid advocate speaks without moral weight, and his arguments merely pass at their intrinsic value, without deriving any additional force from the source from which they proceed.”—*An Essay on the Influence of Authority in Matters of Opinion*, by George Cornewall Lewis, Esq., p. 132.

Sir James Johnston happened to say that he had no regard for the arguments of counsel at the bar of the House of Commons, because they were paid for speaking. *Johnson*. “Nay, sir, argument is argument; you cannot help paying regard to their arguments, if they be good. If it were testimony, you might disregard it, if you knew it were purchased.” There is a beautiful image in Bacon upon the subject: “Testimony is like an arrow shot from a long-bow—the force of it depends on the strength of the hand that draws it; argument is like an arrow from a cross-bow, which has great force though shot by a child.”

judgment. With a view to their elucidation, men of repute, termed in France *experts*, and in Italy *periti*, who have made the matter at issue a special object of study, are called upon for their testimony, and their evidence is generally considered as final and conclusive. In a case in which it is necessary, in order to satisfy the ends of justice, to submit certain portions of food, or the contents of the stomach, to careful chemical analysis, in order to ascertain, by the aid of delicate tests, whether a person had come to his death by fair means, professional gentlemen who have a reputation for having paid particular attention to such investigations, and who are practical and experienced chemists and toxicologists, are called upon for their opinion, and upon the result of their investigations the life or death of a fellow-creature often depends. No reasonable man disputes the value of such testimony.* A similar course is pursued when any difficult and complicated question arises connected with navigation, mechanics, or civil engineering. The most able men of the day are summoned to solve knotty points, and to settle questions of disputed science, which sagacious and experienced minds are only able satisfactorily to determine. For what object are matters of great difficulty and doubt submitted to the adjudication of the judges assembled in the highest courts in the kingdom, if it were not to obtain from men, presumed by their elevated station to possess the *maximum* amount of legal lore, a safe and satisfactory opinion?† If we were not daily in the habit of deferring to the knowledge and judgment of expe-

* "For all purposes of philosophical observation, a knowledge of the proper science and a peculiar training of the senses are requisite, and, therefore, a witness who possesses these qualifications is far more credible than one who is destitute of them. For example, a scientific naturalist, who reports that he has seen an undescribed animal or vegetable in a remote country, is far less likely to be mistaken than a common traveller, ignorant of natural history. A skilled witness of this sort may be considered in a certain sense, as a *witness of authority*, inasmuch as his previous study and habits of observation give a peculiar weight to his report of the phenomenon."—*Essay on Authority in Matters of Opinion*, by G. Cornewall Lewis, Esq.

† Cicero, in enumerating the circumstances which give authority to testimony, places first, *virtus*, and afterwards, *ingenium*, *opes*, *ætas*, *fortuna*, *ars*, *usus*, *necessitas*, and sometimes *concursio rerum fortuitarum*. With regard to the latter, he says, "Sed reliquis quoque rebus, quanquam in iis nulla species virtutis est, tamen interdum confirmatur fides, si aut ars quædam adhibetur (magna enim est vis ad persuadendum scientiæ) aut usus; plerumque enim creditur iis qui experti sunt."—*Topica*, c. 19.

rienced and intelligent minds, why should there exist any necessity for the establishment, in connexion with the judicature of this country, of courts of appeal? Does not the eminent *common law* barrister bow with great submission to the distinguished *equity* counsel, and willingly and implicitly refer to *his* decision matters of great complexity connected with his own department of the profession? Is not the learned body of British jurists divided and subdivided into sections, each having its distinct and separate court? An analogous practice is adopted in our own science, and we are repeatedly availing ourselves of the superior attainments and practical knowledge of those whom we know have acquired a large amount of experience in special departments of our profession. I cannot conceive why medical men, who have devoted themselves to the study of the diseases of the mind, should not be equally competent with the experienced mechanist, the practical engineer, the learned jurist, the scientific chemist, and the toxicologist, to pronounce *ex cathedrâ* on points coming strictly within their own peculiar province.*

Whilst upholding the testimony of able, scientific, and experienced men, I would protect myself from the imputation of urging a slavish or blind submission to men even of admitted acute and vigorous intellects. "Although," says Lord Bacon, "the position be good, *oportet discentem credere*, yet it must be coupled with this, *oportet edoctum judicare*; for disciples do owe unto masters only a temporary belief, and a suspension of

* "In order that a person should be eminent in a learned profession, it is necessary that he should combine a knowledge of its principles with that judgment, tact, dexterity, and promptitude of applying them to actual cases, which are derived from habits of practice. The like may be said of persons conversant in the constructive arts, as architects and engineers, of the military and naval services, of agriculturists, gardeners, manufacturers of different kinds, &c. In order that they may give sound advice with respect to any practical question belonging to their own department, it is necessary that they should combine actual experience with abstract knowledge. In some cases, that experience implies even manual skill, which can only be acquired by practice. For example, a surgeon would not be a competent judge on a question of practical surgery, unless his judgment were assisted and corrected by actual manipulation of his instruments. In like manner a person cannot be a competent judge of works of art, such as statues, pictures, coins, engravings; or of articles of trade, as horses, wines, plate, &c., without practical observation and experience. In these cases a certain training of the sight is necessary, analogous to the training of the hands and limbs in a mechanical employment or trade requiring bodily dexterity."—G. Cornewall Lewis, *On the Marks of Trustworthy Authority, in an Essay on the Influence of Authority in Matters of Opinion*.

their own judgment until they be fully instructed, and not an absolute resignation or perpetual captivity.”*

When a medical man is summoned to record his testimony in a court of law, upon a case in which it is important to ascertain the degree of sanity that existed at any stated period, he gives his opinion to the best of his knowledge and ability, upon an *abstract* point, without any reference to ulterior results. He has not to regard the legal consequences of his evidence; it is not for the witness to consider whether life is to be prolonged to an indefinite period, or whether a fellow-being shall be immediately launched into eternity. To the questions—“Do you consider the party insane?—was he so, according to the best of your judgment, at such a period?” the medical gentleman experienced in the characteristics of insanity answers, negatively or affirmatively. If the accused party escape punishment, as the result of his opinion—if, in consequence of the medical evidence, his life be saved—I do not see by what right he can be held up to public odium and censure. The witness is not to be considered responsible for the operation of the laws (be they good or bad), neither is he accountable for the escape of the prisoner, if acquitted on the plea of insanity, and thereby exempted from the extreme penalty awarded for his crime. The witness is sworn to state the truth according to his honest convictions, regardless of the *legal* results of his evidence.

There is, alas! a disposition in cases of alleged insanity to repudiate in courts of law all evidence of this specific and scientific character. I am bound, in justice to the legal profession, to confess, that, occasionally the evidence of medical men adduced at inquiries of this nature is extremely unsatisfactory. It is too often the practice to place in the witness-box professional men wholly incompetent to give testimony in cases of disputed insanity;—incompetent, from ignorance of the meaning of the ordinary medical terms used to designate the recognised forms of diseased mind, as well as from inexperience in the precise bearing of medico-legal evidence. I have, in my time, seen men manifesting great self-assurance and unbounded confidence in their own knowledge and sagacity, step flippantly and eagerly into the witness-box, only

* *Adv. of Learning*, b. i. vol. i. p. 45.

to retire sadly mortified. It has been my duty to see some melancholy exhibitions of painful professional humiliation, and I must admit, that in most cases they have arisen from an actual want of information on the subjects upon which the witnesses have been examined! If I were not indisposed to descend to particulars, I could refer to several recent trials for illustrations of what I have said. It is too commonly imagined that a knowledge of insanity comes by intuition, and that, without special and particular investigations of this class of affections, any well-informed and regularly-educated medical man is qualified to give evidence in courts of justice upon these matters. This is a sad mistake; but, unfortunately, the discovery is rarely made until the medical man has recorded his testimony.

The illiberal feeling to which I have adverted, as exhibited towards those who, in the discharge of an anxious and solemn duty, are occasionally called upon to give evidence in relation to insanity, has, on more than one occasion, manifested itself in our courts of judicature.

A few illustrations will suffice. The Lord Chief Justice of England, when playfully (I presume) alluding, in the celebrated Bainbrigge case, tried at the Stafford Assizes, to the evidence of the three physicians who had recorded their opinion in favour of the insanity of the testator, observed after they had retired from the witness-box, "The medical men who have just been examined need not be detained any longer?" Mr. Keeting—"Certainly not, my lord;" and upon Sir A. Cockburn assenting, Lord Campbell remarked, "Let it be fully understood, on both sides, that the medical men may take their departure;" and, addressing the three physicians, his lordship continued, "*You may go home to your patients, and I wish you may be more usefully employed there than you have been here!*" Again, in his charge to the jury, fearful that his graceful compliment might be obliterated from the recollection of the court, Lord Campbell added (when analyzing the medical testimony), "*We have had, during this trial, the evidence of three medical witnesses, and I think they might as well have stayed at home, and have attended to their patients.*"*

In connexion with these discursive sallies—these extra-judicial

* Taken from a report of the trial, printed for private circulation, from the short-hand writer's notes.

pleasantries (for such I presume they must be considered)—it is necessary to associate the subjoined facts:—This remarkable and celebrated trial was one of the most important disputed will cases which has been made the subject of litigation, in this country, for a considerable period; upon its issue depended property to a vast amount; the investigation of the facts of the case occupied more than a week; and some of the most illustrious advocates and distinguished common and equity lawyers were retained as counsel. The question at issue rested entirely upon the sanity or insanity of the testator. Evidence of a very conflicting character was adduced; the facts in relation to the alleged insanity were strangely contradictory; and it was therefore deemed necessary to bring specially from London, three physicians, who were, I presume, considered to be men of experience, sagacity, and science, to hear the sworn testimony; and, as *experts*, to state, to the best of their judgment, basing their conclusions upon the evidence adduced in court relating to the testator's condition of mind, whether he, when the will was executed, was of a healthy, sound, and disposing intellect. Can we conceive a more important and relevant question for the medical witnesses to decide, and one coming more legitimately and strictly within their jurisdiction?*

In March, 1848, the following case occurred:—A woman was delivered of a child. On the 10th of December, at the expiration of a week, she was seized with a violent attack of puerperal mania. Mr. Bell, of Tilstead, her medical attendant, gave instructions that she should be carefully watched, and on no account to have access to her child. On the 23rd of December, in the absence of her attendant, she persuaded her daughter to bring the infant to her, and obtaining possession of a razor, she almost immediately cut the child's throat! The prisoner appeared quite calm and collected after the occurrence; she admitted that she had destroyed the child, and that the crime was premeditated. The medical witness, in answer to a question from Lord Denman, before whom the case was tried, very properly declared, that the prisoner might have known that she was going to kill the child;

* In this case the jury returned an unanimous verdict against the will, on the ground of insanity. Owing to some informality, the case was to be tried a second time at Stafford, and two of the former medical witnesses were subpoenaed to give evidence; but, by mutual consent, the will was declared invalid, and consequently the question did not go to trial.

and he was of opinion that she acted under a sudden and uncontrollable impulse. The judge took objection to the term "sudden," because the prisoner had deliberately asked for her child, and had permitted a quarter of an hour to elapse before the razor was solicited. Mr. Bell then, with great propriety, observed, that the act was committed under an uncontrollable impulse, acting upon a mind previously diseased. In his charge to the jury, Lord Denham is reported to have said, that he was of opinion, "That the judgment of the medical gentleman had been very rashly formed." "How," exclaimed his lordship, with marvellous simplicity, "*How could one person dive into the mind of another, and express an opinion with regard to its being in an unsound state, when there was no evidence of any alteration of conduct, or any circumstances in the case to show alienation of mind?*"

If the act itself was insufficient to establish the insanity of the unhappy woman, her *prior* morbid condition—viz., that of *puerperal insanity*, (a form of mental derangement so generally associated with an intense and uncontrollable desire to destroy the offspring)—ought to have satisfied a judge fitted to adjudicate in these important cases, that the evidence adduced was *amply sufficient to justify the acquittal of the prisoner*. Lord Denman, however, thought otherwise.*

Leaving this section of the subject, I now proceed to the con-

* In a case of "wilful fire-raising," tried in Edinburgh some years back, the plea of insanity was raised in behalf of the prisoner. The presiding judge was the Lord Justice Clerk. Medical men of great eminence gave evidence in favour of the culprit; but in consequence of the prisoner "showing a certain degree of cunning and address" during the trial, the judge held that his mind was not in a state to exempt him from legal responsibility; and he laid it down that "this was just one of those cases in which the jury was a better judge of the real state of a man's mind, from hearing all the facts connected with the crime charged against him, than medical men who only saw the prisoner once or twice, when he might be cunning enough to perceive the object of their visit, and carry through a deception upon them for the express purpose of finding what the medical man would be led to think of him." In consequence of his lordship thus throwing aside the medical testimony, a verdict of *guilty* was recorded against the prisoner, and he was sent to Millbank prison preparatory to transportation. Whilst in prison his insanity immediately manifested itself; and it was deemed advisable to send him as a lunatic to Bethlehem hospital. This is but one illustration out of many I could cite, showing the folly of repudiating medical evidence in cases of insanity, and the absurdity of supposing that a jury, however intelligent, and a judge, however conscientious and sagacious, are competent, in questions of this kind, without the aid of scientific medical testimony, to arrive at a right conclusion.

sideration of the principal points involved in this inquiry, premising that I have, in unison with gentlemen of great eminence, of high standing at the bar, as well as with distinguished men connected with our own department of science, had to deplore—to deeply lament—the absence of any approximation to uniformity of opinion ; to regret the want of well-defined and settled *first principles* to regulate our judgment, and serve as beacons, when summoned into courts of justice to record our opinion upon questions of such scientific, social, and national importance. Upon these occasions, how often medical witnesses are conscious of the want of some specific rules to which they could appeal in cases of complexity, of doubt, difficulty, and obscurity ! It is with the object of illustrating some of these points, and of suggesting a few principles in regard to medico-legal evidence, that I bring this matter before the profession.

The occasions upon which medical evidence is required in courts of law in reference to questions of insanity, and competency to manage the person and property, are as follows :—

1.

CASES IN WHICH THE PLEA OF INSANITY IS URGED IN EXTENUATION OF CRIME.

2.

CASES WHERE ATTEMPTS ARE MADE TO INVALIDATE THE LEGAL OPERATION OF TESTAMENTARY DISPOSITIONS OF PROPERTY, ON THE GROUND OF MENTAL INCOMPETENCY.

3.

WHEN LEGAL PROCEEDINGS ARE INSTITUTED TO INVALIDATE A MARRIAGE CONTRACT ON THE PLEA OF INSANITY AND IMBECILITY.

4.

IN COMMISSIONS “DE LUNATICO INQUIRENDQ,” ISSUED BY THE LORD CHANCELLOR, WITH THE VIEW OF ASCERTAINING THE EXISTENCE OF UNSOUNDNESS OF MIND, AND COMPETENCY OF THE PARTY (THE SUBJECT OF INVESTIGATION) TO MANAGE HIS PERSON AND PROPERTY.

5.

CASES IN WHICH MEDICAL MEN ARE CALLED UPON TO CERTIFY TO THE EXISTENCE OF INSANITY, JUSTIFYING AN INTERFERENCE

WITH THE PERSON OF THE LUNATIC, AND DEPRIVING HIM OF HIS FREE AGENCY, EITHER FOR THE PURPOSE OF PLACING HIM UNDER TREATMENT, OR PROTECTING HIM FROM THE COMMISSION OF ACTS OF VIOLENCE TO HIMSELF OR OTHERS.

If we refer to the acknowledged legal text-books upon the "Law of Lunacy;" if we examine the recorded opinions of all the distinguished jurists who have adorned the bench; if we wade through the published decisions of eminent criminal and ecclesiastical judges; if we (as a last resource) appeal to the combined wisdom and elaborate judgment of the learned conclave delegated by the British Parliament in 1843, to give an exposition of the law of lunacy, before the highest court of judicature in the country, we are obliged to confess that there exist no settled, uniform, fixed, or unerring principles of jurisprudence, or legal tests, in regard to questions of criminal or civil insanity.

Analyzing with great care the legal *dicta* of the judges, it would appear that the courts of law have, upon different occasions, admitted the following conditions of mind as evidence of insane and legal irresponsibility:—

1.

AN ABSOLUTE DISPOSSESSION, BY DISEASE, OF THE FREE AND NATURAL AGENCY OF THE MIND; PARTIAL INSANITY BEING NO EXCUSE FOR CRIME.

2.

THE EXISTENCE OF A DELUSION, THE CRIMINAL ACT BEING THE IMMEDIATE AND DIRECT RESULT OF THE MORBID IDEA; THE PROOF OF THE PRESENCE OF A DELUSION HAVING NO POSITIVE AND CLEAR CONNEXION WITH THE ALLEGED CRIME, NOT BEING LEGAL INSANITY, AND NO EVIDENCE OF THE EXISTENCE OF IRRESPONSIBILITY.

3.

A CONSCIOUSNESS OF OFFENDING AGAINST THE LAWS OF GOD AND MAN—IN OTHER WORDS, A KNOWLEDGE OF GOOD AND EVIL.

4.

A KNOWLEDGE OF RIGHT AND WRONG—LAWFUL OR UNLAWFUL—THE PRESENCE OR ABSENCE OF MOTIVE.*

* The judges will not permit the medical witness to infer the existence of insanity from the character of the *act itself*; apart from all other

I cite these *four* points as fairly embodying and truthfully representing the leading and fundamental principles of our criminal jurisprudence. It is unnecessary for me to remind you that occasions have occurred in which the courts have departed—plainly, palpably, and indisputably deviated—from these *dicta*, some of the judges having directed the acquittal of persons arraigned for the commission of capital crimes, in the teeth of the tests laid down in the House of Lords for their guidance. Cases are upon record in which parties have been absolved from legal responsibility who have had no *appreciable* delusion, much less one directly associated with and leading to the commission of the criminal act. Again, “*partial insanity*” has been held as a valid plea. Instances of what are termed “moral” and “impulsive insanity,” “transient” and “homicidal monomania,” have escaped the web of the law, and have eluded the judicial test. Nevertheless, I have placed before you the recognised and admitted legal criteria of insanity in cases of crime, and it is therefore imperative upon us, from our position, knowledge, and experience, to carefully ascertain whether they are *safe principles* upon which to act in the present advanced state of our knowledge of morbid mental phenomena, and in accordance with the existing enlightened state of the sciences of psychology and jurisprudence.

In considering the first legal test, viz. “*an absolute dispossession, by disease, of the free and natural agency of the mind*”—very little need be said. This condition of mental prostration—of intellectual obscurity—obviously can give rise to no doubt, legal difficulty, or disputation. All must acknowledge

evidence of derangement of mind. In the case of Greensmith, tried for murder on the Midland Circuit in 1837, Mr. Justice Parke observed, in his charge:—“Nothing could be more contrary to the law than to infer insanity from the very malignity and atrocity of the crime. It was true, that such crimes could never be committed by men who were in the possession and control of a right reason, and a proper mind; but it was his duty to inform the jury that the complete possession of reason was not essential to constitute the legal, any more than the moral responsibility of man, it being necessary that the party should have sufficient knowledge and reason to discriminate between right and wrong.” This may be sound *law*, but it is not sound *psychology*. In many cases the “atrocity and malignity of the crime” afford to the practical physician invaluable evidence of the existence of insanity, the derangement manifesting itself in the character of the *act itself*. I willingly admit that we should cautiously act upon such evidence; but should we not be culpable if we were to set it altogether aside?

the wisdom of exempting this class from responsibility and punishment. In regard to the second point—that of “partial insanity”—the law is thus expounded by the judges. In answer to the question, “If a person under an insane delusion as to existing facts commits an offence in consequence thereof, is he thereby excused?” the reply was as follows: “If the delusion were only *partial*, the party accused was *equally liable* with a person of sane mind. If the accused killed another in self-defence, he would be entitled to an acquittal; but if the crime was committed for any supposed injury, he would then be liable to the punishment awarded by the law to his crime.” It will thus be perceived that the law repudiates “partial insanity” as a plea in extenuation of crime, or as an exemption from punishment. In the strictly legal signification of the term, what is “partial insanity?” Lord Lyndhurst clearly defines the condition to be, “a mind in an unsound state—not unsound upon one point only, and sound in all other respects, but that this unsoundness manifests itself principally with reference to some particular object or person.” According to this definition, it is evident that “partial insanity” and “monomania” are not, as some have supposed, exactly equivalent terms: they have, however, been so considered by many medical and legal authorities. According to the 64th article of the French penal code, no person, whilst insane, is considered responsible for a criminal act, “Il n’y a ni crime ni délit lorsque le prévenu était en état de démence au temps de l’action.” In opposition, however, to this article, M. de Peyronnet, the Advocate-General of France, in the cases of Leger, Feldtmann, and other insane homicides, adopted the view of Lord Hale on this subject, as to the existence of a partial and a total insanity, laying down the principle, that the latter “can alone extricate the criminal from the penalties of the laws.” “The distinction between partial and total insanity,” he observes, “throws great light on the questions of insanity.” In confirmation of this view of the case, he referred at some length to the opinions of Lord Hale, and quoted a passage from his celebrated “Pleas of the Crown.” The line of argument, however, adopted by the Advocate-General on these occasions displeased highly the medical jurists of France. M. Georget, who has expressed his astonishment at the *dicta* of Lord Hale, says,

"This writer (Lord Hale) appears professedly to consider property of higher value than human life! There is, then, no excuse for the unfortunate lunatic, who in a paroxysm commits a reprehensible action, even although it should appear to be the result of his particular illusion! and yet the civil acts of this same individual are to be annulled, although they have no relation to the insane impressions which might have influenced his conduct! And even M. de Peyronnet cited such maxims as these with approbation—at least we do not find that he has objected to any of them; all monomaniacs, according to their statements, are liable to become criminals, in spite of the 64th article of our penal code, and may undergo the penalties recorded for atrocious offences."*

I will not, in this stage of the inquiry, consider whether, metaphysically examined, the admission of a "partial" as well as a "general" insanity does not vitiate the psychological theory of the *individuality of the mind*, or the *unity of the consciousness*; but viewing the phrase to import an unsoundness of mind manifesting itself in the form of "monomania," or delusion upon *one prominent point*, the mind being *apparently sane and rational upon all others*, I would ask men of observation and experience, if, in such cases (the most pure and uncomplicated instances that the mind can conceive), the party so clearly and manifestly insane should be held responsible to the criminal law for his conduct, and be treated as if he were of perfectly rational and sane understanding?

Partial insanity no valid excuse—no extenuation for crime! Partial insanity no plea—no justification in criminal cases! How monstrously unphilosophical, how wildly fallacious, how opposed to positive facts, how absurdly illogical, how grossly unjust, how

* "A man may be deranged in his mind, his intellect may be insufficient for enabling him to conduct the common affairs of life, such as disposing of his property, or judging of the claims which his respective relations have upon him; and if he be so, the administration of the country will take his affairs into their management, and appoint to him trustees; but, at the same time, such a man is not discharged from his responsibility for criminal acts. I say this upon the authority of the first sages in this country, and upon the authority of the established law in all times, which law has never been questioned, that although a man be incapable of conducting his own affairs, he may still be answerable for his criminal acts, if he possess a mind capable of distinguishing right from wrong."—*Speech of Attorney-General Sir Vicary Gibbs, on the Trial of Bellingham for the murder of the Right Hon. Spencer Perceval.*

repulsive, how abhorrent to every right-thinking, to every humane mind, and to every christian and philanthropic heart! Apply this judicial, antiquated, and absurd dogma to the great mass of miserable and irresponsible lunatics at this moment legally in confinement, and two-thirds of them would be immediately made amenable to the law for their conduct! If partial insanity can be clearly established, who would be bold enough to declare or define the precise limits of the disease, or to sketch the boundary-line separating a responsible from an irresponsible state of mind? "Where is," we might exclaim, in the language of a distinguished modern historian, when discussing the legality of the resistance made to the tyranny of James II., "where is the frontier where virtue and vice fade into each other? Who has ever been able to define the exact boundary between courage and rashness, between prudence and cowardice, between frugality and avarice, liberality and prodigality? A good action is not distinguished from a bad action by marks so plain as those which distinguish a hexagon from a square."* Who can safely draw the line of demarcation between night and morning, between light and darkness? or say at what precise moment health fades into disease? "Who can mark precisely the frontiers, the almost imperceptible limits, which separate insanity from sanity? Who can number the degrees by which reason declines and falls into annihilation? This would be to prescribe limits to that which is illimitable, to give rules to folly, to be bewildered with order, to be lost with wisdom."†

The existence of *delusion* is the next judicial test and legal plea referred to. "The true criterion" (says Sir John Nicholl), "the true test of insanity, I take to be absence or presence of what, used in a certain sense, is comprehended in a single term—*viz.*, *delusion*. *In the absence of anything in the nature of delusion, the supposed lunatic is, in my judgment, not properly insane.*"‡ Lord Denman thus gives exposition to the law: "To say a man was irresponsible, *without positive proof of any act to show that he was labouring under some delusion, seemed to him to be a presumption of knowledge, which none but the*

* History of England, by the Right Hon. B. Macaulay, M.P., &c.

† M. d'Aguessau, before the Parliament of Paris.

‡ Dew v. Clarke.

great Creator could himself possess!"* Such being the law, what, I ask, is the legal definition of this valuable, this fixed, and infallible test? Lord Brougham defines a delusion to be, "*a belief of things as realities which exist only in the imagination of the patient.*" Sir John Nicholl says, "*A delusion is a belief of facts which no rational reason would have believed.*" When speaking of the latter definition, Lord Brougham observes that it is liable to one exception—viz., that it gives a consequence for a definition. His lordship then refers to his own definition, which he declares not to be open to the same objection.

Belief depends upon testimony; and the degree of credence attached to such testimony must necessarily be materially influenced by the nature of the evidence adduced, as well as by the character of the party giving it, and the knowledge, intelligence, and health of the mind, the recipient of it. May not a person believe in the existence of "something extravagant," which exists "only in his imagination," and yet be free from delusion, and of sound and rational mind? A distinguished philosophical writer says, "We obtain experience either by the evidence of our own senses, or by the testimony of others. The testimony of our senses, though generally considered as one of the highest degrees of evidence, is often fallacious and often deceptive. Although the impression is properly made on organs that are in their sound state, yet the ideas conveyed thence to the mind may be so varied and modified by the imagination as entirely to mislead the judgment. Thus every part of natural history, and medicine above all others, is crowded with facts, *attested by eye-witnesses of supposed veracity, which facts, notwithstanding, never had any existence but in their own imagination.*"† A person of sound mind may, upon false, shallow, and inconclusive evidence, believe in the wildest improbabilities, and firmly maintain their truth; nevertheless, who would have the boldness to affirm, that he was under a delusion?‡ Lord Brougham's definition appears to involve exclusively

* *Regina v. Smith.*

† *Campbell's Philosophy of Rhetoric.*

‡ "False and unfounded opinions have been entertained by entire communities without question, for ages. Not merely has this been the case with respect to false religions, and legendary accounts of early history, interwoven with the religious and patriotic feelings of the people, but even

the action of the *healthy* imagination. If I were bold enough to commit myself to a definition of the term delusion, I would venture, with submission, to give the following:—*A delusion is a belief in the existence of a something extravagant, which has, in reality, no existence except in the DISEASED imagination of the party, and the absurdity of which he cannot perceive, and out of which he cannot be reasoned.* In this definition I think a scientific distinction is drawn between the *eccentric* conceptions of a *healthy*, and the *morbid* creations of a *diseased* imagination and judgment; a principle which we should never lose sight of in our medico-judicial inquiries, definitions, and evidence. By legal authorities, delusion and insanity appear to have been viewed as convertible terms. Considering, however, *delusion* to be a test of insanity, have the judges uniformly regarded it as *the* standard of responsibility in criminal proceedings? In the case of Overston, Mr. Justice Maule altogether repudiated the test; and in the celebrated Bainbrigge case, Lord Campbell admitted, that “*mania may exist without delusion.*” Need I advance an argument in corroboration of Lord Campbell’s dictum, or in opposition to the dogmatic and bold assertion of Lord Denman? It is allowed as the result of the collective experience of those competent to give an opinion upon the matter—that positive, dangerous, and irresponsible insanity, is often seen unassociated with any *manifested* delusive impression, or *appreciable* hallucination.

The legal test that next presents itself for consideration is, the presence or absence of a *motive* for the commission of the crime.* Dr. Prichard observes, “The act of homicidal insanity is different in its nature and moral causes from that of murder. Men never commit crimes without some motive; the inducement which leads them to an atrocious act is of a kind which other men can appreciate and understand, though they do not sympathize with them.

with respect to facts in the natural sciences, which admitted of being verified by easy and simple observation and experiment.”—*G. C. Lewis’s Essay.*

* “It must for ever be remembered that with motives merely the legislator and the magistrate have nothing to do; and that actions and external facts, as the ends or objects of motives, are the only legitimately cognisable subjects of human tribunals. *Actus non facit reum nisi mens sit rea*, is a rule of reason and justice not less than of positive law.”—*On the Principles of Circumstantial Evidence.* By William Wills. 1850.

Jealousy, hatred, revenge, excite some; others are moved by the desire of plunder—of getting possession of money or property. The act of a madman is for the most part without motive.” I have thus stated Dr. Prichard’s view rather in detail, because I shall feel it my duty to express an opinion adverse to that which this physician entertained. As a test of criminality, I consider the one just propounded not only as unsafe, but as unphilosophical. On the trial of Francis for shooting the Queen, this plea was urged in favour of the prisoner; but what did the then Solicitor-General urge respecting its inapplicability? “This doctrine about motive is of a most dangerous character, and must be very guardedly received. It is very difficult for you (the jury), very difficult for any well-regulated mind not accustomed to contemplate the workings of iniquity—to discover the motives for crime. What motive instigated the execrable assassin in Paris, who shot at his king, and deluged the streets with blood by means of his infernal machine? Did any one ever hear propounded, in a court of justice, a doctrine that would lead to so much dangerous consequences to society, as that you must ascertain the motive before you convict of the crime?” Is this a test, I ask, that can safely be relied upon in all cases of criminal insanity? Are not the insane often impelled to the commission of acts of violence and murder *by the same motives, feelings, and passions, that influence and regulate the conduct of sound, healthy, and rational minds?* There cannot be any difference of opinion upon this point among those practically acquainted with criminal lunatics, and with the characteristics of mental derangement. It would be monstrously cruel and unjust to apply such a test in criminal cases. Were such to be our standard of appeal, great crimes would escape unpunished, and persons indisputably insane and irresponsible would often (to our great reproach) suffer the extreme penalty of the law!

A patient who was confined in the Manchester Lunatic Asylum had been subjected to very cruel treatment by the person who had the care of him. He consequently attacked the attendant, and killed him. He related, with great calmness and self-possession, the particulars of the transaction to the physician of the asylum. He said, “The man whom I stabbed richly deserved it. He behaved to me with great violence and cruelty; he degraded

my nature as a human being ; he tied me down, handcuffed me, and confined my hands much higher than my head with a leathern thong ; he stretched me on the bed of torture ; after some days he released me. I gave him warning, for I told his wife I would have justice of him. On her communicating this to him, he came to me in a furious passion, threw me down, dragged me through the court-yard, thumped me on the breast, and confined me in a dark and damp cell. Not liking this situation, I was induced to play the hypocrite. I pretended extreme sorrow for having threatened him, and by an affectation of repentance, prevailed on him to release me. For several days I paid him great attention, and lent him every assistance. He seemed much pleased with the flattery, and became very friendly in his behaviour towards me. Going one day into the kitchen, where his wife was busied, I saw a knife ; this was too great a temptation to be resisted ; I concealed it about my person, and carried it with me. For some time afterwards the same friendly intercourse was maintained between us ; but as he was one day unlocking his garden-door, I seized the opportunity, and plunged the knife up to the hilt in his back." He always mentioned this circumstance with peculiar triumph, and his countenance, a most cunning and malignant one, became highly animated at the conclusion of the story.*

The following case in point excited much interest some years back, in Philadelphia. Eighteen years previously to the commission of the crime, a confectioner of the name of Wood had come from England ; had carried on his trade first in New York, and then in Philadelphia ; had realized money, and acquired a respectable character. He had an only daughter, whom he was desirous of advancing into a higher station by marriage. But he himself was not in genteel society ; yet he restrained her from associating with persons of her own condition ; and she therefore had no freedom in any circle. She assisted him in keeping his shop, one of the first of its kind in Philadelphia. A young man of inferior habits and station made love to her, and persuaded her to leave her father's roof and marry him. She was absent only one night, when she returned home, and confessed she was a married woman. Her father became violently and passionately

* Dr. Haslam.

excited ; he drank a large quantity of rum ; and, under the combined influence of disappointed ambition, rage, and intoxication, he shot his daughter with a pistol. He did not attempt to escape. When he became sober and free from excitement, he had no knowledge of his crime. He was tried for the murder. His counsel pleaded insanity, and proved previous mental aberration ; but, in his defence, he mainly relied on the shock given to his feelings by his daughter's conduct having produced a real insanity preceding the homicide. A verdict of lunacy was recorded. If this case had occurred in England, it is questionable whether he would have been acquitted.

It has been proposed, that the question of legal responsibility should be determined by the fact, whether the party, when he committed the offence, knew that he was acting in opposition to those generally-received and recognised moral obligations which are supposed to govern and influence sane, rational, and christian minds. The question which the jury has to consider, to use the language of one of the most distinguished and enlightened British judges that ever adorned the bench, is, " Was the prisoner conscious that he was committing a crime against the laws of God and nature ? " *

In considering the value of this test, we are bound to remember that there is a class, happily for themselves and for society insignificant in a numerical point of view, who repudiate the idea of a Divine law regulating their actions and as binding upon their consciences, and who deny the existence of a Supreme Being. I readily admit that in all important matters of legislation we are not justified in considering the anti-christian or heterodox opinions of small sections of the community. All our legislative enactments are rightly based upon the assumption that the great mass of mankind worship a Supreme Being, and implicitly recognise the doctrine of a Divine revelation ; nevertheless, if we have a legal test or standard to which we can refer, it should be *catholic* in its character, and be susceptible of universal application. Imagine a person arraigned for the commission of a capital crime. The plea of insanity is urged in his defence. In expounding the law, the judge informs the jury, that the question of responsibility in connexion with insanity rests upon the fact

* Lord Lyndhurst.

whether the prisoner had at the time a consciousness of his having deviated from the law of God. Was he sensible of this? If so, he is to be considered amenable to justice, and must expiate his crime upon the gallows. I can conceive, after such a legal exposition, the prisoner making a declaration of his being by virtue of his principles *placed beyond the jurisdiction of such a test*, and maintaining that he could not morally, legally, or logically be considered to be conscious of violating laws that in reality he never believed to exist. I will admit that this may be considered to be an extreme case. I merely cite it with the view of establishing my position, that there is no legal test yet propounded applicable, or which could be indiscriminately applied, to *all* criminal cases of insanity.

Among the other judicial standards or criteria of insanity, is that recommended by the late Lord Chief Justice Tindal. I refer to his suggestion to apply the test of the knowledge of "right and wrong" to every case of crime alleged to be associated with and the result of insanity, and upon its existence or non-existence to determine the presence of legal responsibility. Lord Chief Justice Mansfield says, in reference to this test,* "The law is extremely clear. If a man was deprived of all power of reasoning, so as not to be able to distinguish whether it was right or wrong, to commit the most wicked or the most innocent transaction, he could not certainly commit an act against the law. Such a man, so destitute of all power of judgment, could have no intention at all. In order to support this defence, however, it ought to be proved by the most distinct and unquestionable evidence that the criminal was incapable of judging between right or wrong. It must in fact be proved, beyond all doubt, that at the time he committed the atrocious act with which he stood charged, he did not consider murder was a crime against the laws of God and nature. There was no other proof of insanity which could excuse murder or any other crime. There were various species of insanity. Some human creatures were void of all power of reasoning from their birth; such could not be guilty of any crime. There was another species of madness, in which persons were subject to temporary paroxysms, in which they were guilty of acts of extravagance; this was called lunacy

* Trial of Bellingham.

If these persons committed a crime when they were not affected with the malady, they were, to all intents and purposes, amenable to justice. So long as they could distinguish good from evil, so long would they be answerable for their conduct. There was a third species of insanity, in which the patient fancied the existence of injury, and sought an opportunity of gratifying revenge by some hostile act. If such a person was capable, in other respects, of distinguishing right from wrong, there was no excuse for any act of atrocity which he might commit under this description of derangement. The witnesses who had been called to support this extraordinary defence had given a very singular account, in order to show that at the time of the commission of the crime the prisoner was insane. What might have been the state of his mind some time ago, was perfectly immaterial. The single question was, whether at the time this act was committed, he possessed a sufficient degree of understanding to distinguish good from evil, right from wrong, and whether murder was a crime not only against the laws of God, but the law of his country.”*

It has been a question with metaphysicians, whether, *abstractedly* considered, there are conditions or states to which the terms “right and wrong” can, with strict philosophical precision, be applied. Are not these general terms, it is urged, merely significant of the resemblance of various particular actions which agree in exciting in the mind certain feelings that are analogous? In different phraseology, are not the terms “right and wrong” general expressions indicative only of analogous relations which certain actions bear to certain emotions? Dr. Hutchinson (who has, perhaps, taken a more ultra view of this question than any other metaphysician) says, “There is no right or wrong, virtue or vice; but there are agents whose actions cannot be contemplated by us without an emotion of approbation or disapprobation; and all actions, that is to say, all *agents* that agree in exciting moral feelings, which are thus analogous, we class together as virtuous or vicious from this circumstance of felt agreement alone.

* “They could only know one kind of right and wrong; the right is, when you act according to law; and the wrong is, when you break it. Distinguishing right from wrong, meant a knowledge that the act the person was about to commit was punishable by the law.”—Lord Brougham: *Speech in the House of Lords*.

The similarity of the emotions which we feel in these particular cases, is thus all to which we owe the notions or ideas of right or wrong, virtue and vice." Dr. Brown, in commenting upon this passage, observes, "that right and wrong signify nothing in the objects themselves. They are words expressive only of relation, and relations are not existing parts of objects, or things to be added to objects, or taken from them. There is no right or wrong, merit or demerit, *existing independently of the agents who are virtuous or vicious.*"*

I allude to these generally received metaphysical *dicta*, not because I would be guilty of so gross an absurdity as to deny the existence of such principles of action, but because I infer from the particular and special reference made to this legal test, that it is supposed these conditions are easily appreciable and almost tangible states, to which in complex and obscure cases the jurist and psychologist might at once appeal for an immediate and certain solution of their difficulty.

Before this test can be admitted as a safe standard in questions of moral and legal responsibility, it will be necessary to establish an infallible rule, by which we may be able to trace accurately the distinction between right and wrong. Moral philosophers, men of science, theologians, political and social economists, philosophers and statesmen, are unfortunately very much at variance upon many apparently self-evident, and first principles, relating to their respective departments of inquiry. Need I refer to the great discrepancy of opinion existing among different religious denominations, each sect maintaining its own *dicta* to be "right," and the views of other sections of the religious world to be "wrong." The Roman Catholics consider themselves to be right, and the Protestants to be wrong, and *vice versa*. A few of the Quakers, objecting upon principle to all war, on the ground of its not being sanctioned by scripture, and from a conviction of its being morally wrong, resolutely refuse to pay a war-tax. We differ from the Quaker, and entertain the opinion, that, under certain circumstances, war is right and justifiable. A large section of the religious community denounce infant baptism as "wrong;" a still more important body think it "right." There are many who repudiate the hierarchy and priesthood, from a conviction of their anti-scrip-

* On the Philosophy of the Human Mind. By Dr. T. Brown.

tural origin, character, and tendency. If we turn to the political and scientific world, we find large bodies of intelligent and reflecting men holding opinions diametrically at variance with each other, and advocating the most opposite and irreconcilable views of the same question, and contending most heroically for the truth of their own individual and sectional opinions, from a persuasion—an unalterable conviction—of their being “right,” and the sentiments of their adversaries, “wrong.” The *right* of *to-day*, in matters of theology, philosophy, and science, may be the *wrong* of *to-morrow*; and what is now “lawful,” may, in the course of a short parliamentary session, be made illegal by the introduction of new statutes! Analyzing this much-eulogized legal test as metaphysicians, as medical philosophers, and as men of the world, are we not compelled to pronounce it to be worthless, and practically inapplicable? Our views of “good and evil,” “right and wrong,” “lawful and unlawful,” must necessarily be dependent upon, and fluctuate in obedience to, temperament, caste, climate, progress of civilization, education, knowledge, early training, and example. If there be within us an innate principle termed “conscience,” acting *independently of the judgment*—and existing as a separate agent or faculty of the mind (which many metaphysicians and theologians deny), unerringly suggestive to us of a knowledge of “right and wrong,” is not this moral sense or instinct often destroyed by adventitious circumstances, its perceptions deadened, paralyzed, or perverted?

Considering this legal test of criminality apart altogether from the metaphysical objections to which it is amenable, I maintain, that it never can be safely depended upon, in all cases of insanity. It is a notorious fact—a matter of every-day occurrence, and in accordance with the experience of those conversant with the phenomena of lunacy,—that the insane—the positively and undeniably insane—like many rational persons, often

“Know the ‘RIGHT,’ and yet the ‘WRONG’ pursue,”

and frequently act in direct opposition to their own clear and unmistakable convictions of what is “right and wrong,” “good and evil,” “lawful and unlawful.” Many a maniac has committed a crime of great atrocity, with a full, unfettered, and unclouded consciousness and knowledge of its unlawfulness, its sinfulness, its criminality, and of the legal penalties to which he is,

by his actions, exposing himself. A lunatic has manifested an intense and morbid desire for death; not being suicidally disposed, he endeavours to effect his purpose by sacrificing the life of another: he designedly brings himself within the pale of the law, that he may compel others to do what he has not the courage of accomplishing himself. How absurd, cruel, and unjust it would be to apply the test of a knowledge of what is lawful or unlawful to such a case?

An intriguing, unruly, vicious lunatic was detected with a piece of iron which he had contrived to shape like a dagger, with a handle fixed firmly in it. Upon being interfered with, he became excited, abusive, and violent. He was placed under restraint; after uttering the most awful imprecations, he exclaimed to his attendant, "I'll murder you yet; *I am a mad-man, and they cannot hang me for it!*"

When Martin set York Minster on fire, a conversation took place among the inmates of a neighbouring lunatic asylum, having reference to this general topic of remark and discussion. The question argued was whether Martin would suffer the extreme penalty of the law for his crime. Various were the opinions expressed. In the midst of the conversation, one patient, apparently as mad as the rest, exclaimed, "He (Martin) will not be hanged." "For what reason?" interrupted several voices. "They cannot hang him," replied the lunatic, "*he is one of ourselves.*" Of what value is this legal test, if applied to such cases? Before this can be recognised as a safe standard, it will be necessary for British jurists to lay down for their *own* guidance certain fixed and unalterable principles of jurisprudence. Is it not a notorious fact, that on apparently clear and well recognised points, lawyers of eminence have arrived at the most opposite conclusions? One court reverses the judgment of an inferior tribunal, and one distinguished jurist overrules the decision of his predecessor. As long as able judges differ among themselves upon what may be termed *first principles of law*, it will be unreasonable to expect that *we* should prostrate ourselves before the legal test which I have been analyzing.

Dr. Mittermaier, a German jurist, maintains that two conditions are required to constitute that freedom of will which is essential to responsibility—viz., a knowledge of good and evil, and the facility of choosing between them. The knowledge of

good and evil will require, first, that knowledge of one's self by which we recognise our personal identity, and refer our acts to ourselves ; secondly, acknowledgment of the act itself—*i. e.*, of its nature and consequences ; thirdly, a knowledge of the relations of the act both in regard to men and measures ; fourthly, a knowledge that the act in question is prohibited either by the moral or the statute law. He rebukes the English jurists for their rigid adherence to the antiquated doctrine, that whoever can distinguish good from evil, enjoys freedom of will, and retains the faculty, if he chooses to use it, of framing his actions to the requirements of the law. The true principle, according to this authority, is to look at the personal character of the individual whose responsibility is in question ; to his grade of mental powers ; to the notions by which he is governed ; to his views of things ; and finally to the whole course of his life, and the nature of the act with which he is charged. A person who commits a criminal act, being fully cognisant of the nature of the laws, and of the punishment to which he is exposing himself, may yet be of insane mind. The true test of irresponsibility should be, not whether the party accused was aware of the criminality of his actions, but whether *he has lost all power of control over his actions.*

As the plea of insanity is one of the most important that can be urged in a court of justice in extenuation of crime, it should never be had recourse to except in clear and obvious cases, in which little or no doubt can be entertained, not only of the existence of mental derangement, but of derangement of such a *kind*, and to such a *degree*, as to justify the immediate admission of the fact, and the necessary and consequent acquittal of the prisoner. The utmost vigilance and jealous caution should be exercised in all inquiries of this nature ; and medical men, considered specially competent to the elucidation of such intricate psychological phenomena, should be particularly guarded in sanctioning, by their authority, the plea of insanity, exhibiting, upon all occasions, a fear lest their opinions should be made available for the purposes of shielding great criminals from the just and legal penalties awarded for the commission of crime.

The reflecting portion of the public and profession naturally place a high value upon the experience, testimony, and judgment of men whose peculiar studies and opportunities enable

them to obtain a practical insight into morbid aberrations of mind. If it be found that men of position and ability are disposed to be lax in the use of this important plea, a reaction will inevitably ensue, and cases of this character will be left exclusively to the adjudication of the judicial tribunals, medical evidence being entirely ignored in our courts of law.

In forming an opinion of the criminal as well as the civil responsibility of any case of alleged insanity, it is very essential, with the view of our arriving at right results, that we should make a just and scientific distinction between the actions of a *naturally* eccentric, ill-regulated, perverse, and wicked mind, and the mental disturbance, perverseness, caprice, vice, extravagance of conduct, ungovernable passion, sullenness of disposition, and melancholia, consequent upon physical disease of the *sensorium*, or organs in close pathological relationship with it, implicating the healthy action of thought. There is a *normal* and *natural* eccentricity, a *healthy* mental idiosyncrasy, caprice, and feeling, distorted and perverted affection, disposition to acts of cruelty, vice, brutality, *existing independently of that irregularity and disturbance in the operations of the intellect—those perversions of the affections and madness of conduct, the clear, unmistakable, and undoubted consequence of a DISEASED MIND.* As a man may have *natural physical*, so may he exhibit a *connate mental* defect, apart altogether from actual cerebral, and consequent mental disease. It should never be forgotten that there is always floating upon the surface of society a large body of strange, wayward, intemperate, eccentric persons, criminally and viciously disposed, subject to every bad passion, impulsive in all their movements, addicted to habits of debauchery, who lead a kind of animal life; whose mode of existence appears fully to realize Lady Morgan's somewhat illiberal conception of the character of the modern Italians—

“Who eat, drink, and sleep. What then?
Who sleep, drink, and eat again.”

There is a healthy and *natural* melancholy, and a *diseased* depression of spirits. There is a species of drunkenness which is *not* insanity, and there is a form of mental derangement solely indicated by inveterate and uncontrollable habits of intemperance.

There is a brutality existing irrespectively of lunacy, and

violence of conduct, and cruelty of disposition, clearly the effects of a morbid mental condition. There is a natural, and, speaking medico-psychologically, a healthy improvidence, impetuosity of temper, and vice, which should not be confounded with abnormal and diseased states of the affections, passions, appetites, and propensities. The melancholia—the sullen gloom—the moroseness of real life (which is *not* “alienation of mind”), is well described by an able metaphysician:—“It disposes the person to acts of unkindness, and makes him the slave of every bad passion; it produces a fretfulness in all the daily and hourly intercourse of life; it produces a domestic tyranny which brings, alas! with it a train of heartburnings and bitterness. This melancholy temper is poisonous to the happiness, not only of the individual, but of all that are brought within the circle of its baneful influence.”

Beattie’s “Minstrel” is described as one of those half-cracked, half-witted, sombre, clever, sullen, eccentric, melancholy youths; the *type* of thousands who are daily mixing in society, and whose condition might easily, upon a superficial examination, be confounded with insanity, and whose state of mind would certainly, by some, be considered “unsound,” were they guilty of any *overt* act of sufficient importance to call public and professional attention to their moral and legal responsibility.

“Silent when glad; affectionate, though shy;
And now his look was most demurely sad,
And now he laughed aloud, yet none knew why,
The neighbours stared and sighed, yet bless’d the lad;
Some deemed him wondrous wise, and some believed him mad.”

I cannot conceive a position of graver responsibility than that assumed by the medical witness when called upon in a court of justice to give evidence in criminal cases. Let me earnestly entreat him, before discharging these solemn duties, to make himself master of all the facts of the case. He should not assume for granted the representations of those anxious to establish the insanity of the criminal; were he to do so, he would occasionally be sadly deceived. He should never forget that he has a *public* as well as a *professional* duty to discharge; and he is bound, as a citizen of the state, as well as a member of an important and

* *Philosophy of the Human Mind*, chap. on “Immediate Emotions.” Dr. T. Browne.

learned section of society, to protect himself from the possibility of being deceived as to the facts of any given case presented to him for his opinion. He must not permit his feelings to overpower and interfere with the free and unclouded operations of his judgment.

Under these circumstances, every possible influence will occasionally be exercised to induce the witness to adopt an opinion favourable to the prisoner. He will perceive the necessity of patiently investigating the case itself, and will not be satisfied with one or two interviews with the alleged lunatic. He must obtain from the criminal an account of the act with which he may be charged, and his reasons for committing it; he will also acquire from his relatives, friends, and companions, an insight into his former mode of life—his habits of thought—his prior state—the peculiarities of his disposition—whether there exists in the case an hereditary predisposition to insanity; and other circumstances likely to elucidate the actual state of the mind at the time when the alleged offence was perpetrated. Great perseverance and ingenuity are often required before the truth can be elicited. In these cases, the crime is occasionally committed during a paroxysm of transient insanity; the mind manifesting no symptom of derangement after the perpetration of the offence. Again, a lunatic has been known to commit murder in a fit of frenzy, his sudden arrest and committal to prison temporarily restoring the mind to its healthy balance. A man has been guilty of a capital crime; has been seized and sent to prison, and has, from remorse, or a sense of horror at his position, suddenly become insane; his derangement only exhibiting itself after his arrest. Persons have been known to commit the crime of murder whilst in a state of somnambulism, and also during that half-unconscious condition between sleeping and waking. Cases of this description are extremely perplexing to medical jurists. If it can be satisfactorily proved that the person perpetrated the murder whilst in this state—if the fact be unequivocally established—then, I conceive, it ought to be considered as a good exculpatory plea. It should never, however, be forgotten, that these cases are easily simulated. Examples of this character are recorded by medical writers. A person has been suddenly roused by a frightful dream, and, whilst under its influence, has been known to take away human life. Suicide has been committed

under analogous circumstances. A person, apparently well, has gone to bed without manifesting the slightest tendency to self-destruction ; he has awoke suddenly and destroyed himself. A case, illustrative of this fact, is on record. It is as follows : "An old lady residing in London awoke in the middle of the night, went down stairs, and threw herself into a cistern of water, where she was found drowned." It was maintained that the suicide was the result of certain mental impressions conjured up in the mind during a dream. Dr. Pagan refers to the following interesting case, to prove that murder may be committed by a person when under the effects of a frightful vision.

Bernard Schedmaizig suddenly woke at midnight ; at the moment he saw a frightful phantom, or what his imagination represented as such—a fearful spectre ! He twice called out, "Who is that ?" He received no answer. Imagining that the phantom was advancing upon him, and having altogether lost his self-possession, he raised a hatchet which was beside him, and attacked the spectre : it was found that he had murdered his wife !

A pedler, who was in the habit of walking about the country armed with a sword-stick was awakened one evening, while lying asleep on the high road, by a man suddenly seizing him, and shaking him by the shoulders. The man, who was walking by with some companions, had done this out of a joke. The pedler suddenly woke, drew his sword, and stabbed the man, who soon afterwards died. He was tried for manslaughter. His irresponsibility was strongly urged by his counsel, on the ground that he could not have been conscious of his act in the half-waking state. This was strengthened by the opinions of medical witnesses. He was, however, found guilty.* The murder, in this instance, may have been the result of passion. We have no evidence to the contrary.

In criminal cases, should the witness be interrogated as to the alleged lunatic's consciousness of right and wrong, or as to his knowledge that he was violating the law of God and man at the moment when the crime was committed, I would strongly suggest that he should, unless the case be one of obvious lunacy,

* British and Foreign Medical Review.

decline answering the question. The witness may have a clear and positive opinion as to the existence of insanity; but how can he, in every case, solve the question as to the lunatic's ability to distinguish accurately between good and evil, right and wrong, lawful and unlawful? Dr. Haslam says, when alluding to this point, that "It is not the province of the medical witness to pronounce an opinion as to the prisoner's capability of distinguishing right from wrong. It is the duty of the medical man, when called upon to give evidence in a court of law, to state whether he considers insanity to be present in any given case, not to ascertain the quantity of reason which the person imputed to be insane, may or may not possess. If it should be presumed that any medical practitioner is able to penetrate into the recesses of a lunatic's mind at the moment he committed the outrage; to view the internal play of obtruding thoughts and contending motives; and to depose that he knew the good and evil, right and wrong, he was about to commit,—it must be confessed, that such knowledge is beyond the circuit of our attainment. It is sufficient for the medical practitioner to know that the person's mind is deranged, and that such a state of insanity will be sufficient to account for the irregularity of his actions; and that in a sound mind the same conduct would be deemed criminal. If violence be inflicted by such a person during a paroxysm of rage, there is no acuteness of metaphysical investigation which can trace the succession of thoughts, and the impulses by which he is goaded for the accomplishment of his purpose."

In many cases the plea of insanity is entirely based upon the assumption that the prisoner is "*morally insane*." It is much to be lamented that the term "moral insanity" was ever introduced by Dr. Prichard into our psychological nomenclature. The phrase is generally repudiated in our courts of law; it has given rise to much cavilling and disputation, and its adoption has unfortunately exposed the profession to great odium and obloquy; and has, I think, very materially damaged the moral weight of medico-legal testimony. It has been asserted, that the term is used with the view of protecting the criminal from just punishment, and of shielding vice, extravagance, malignity, debauchery, cruelty, crime, and brutality, from the natural emotions of horror and disgust with which such actions should be contemplated

by every right-thinking and well-constituted mind. "Moral insanity!" I might conceive the judge to exclaim; "I will not listen to such an excuse—to such a plea—to such evidence! I will not sit here, and, whilst administering justice, permit the great truths of science to be thus perverted and abused, with the view of destroying the practical application, and beneficial and conservative operation, of the criminal law of the land!"

Let us consider the subject of "moral insanity," or, as Pinel terms it, "*emportement maniaque sans délire*," not only *pathologically*, but *metaphysically*. All authorities agree in opinion, that the specific characteristics of this form of derangement are dependent upon a lesion of the affective or motive powers of the mind, apart altogether from disorder of the *intellectual* faculties, or powers of ratiocination. In the first place, I would ask, whether the disease so designated is *purely an affection of the moral faculties*; and whether, as metaphysicians, we are justified in drawing so palpable a line of demarcation between those faculties of the understanding that reason, judge, compare, reflect, and those that supply motives to the reason, and are termed, by metaphysicians, the *active* principles of the mind?

Viewing the question under review *pathologically*, I ask whether, in cases of insanity which are represented to consist in lesions of the will—in ungovernable impetuosity of temper—loss of self-control—perversion of the affections and propensities—cases in which the mental alienation is manifested more in *conduct* than in *ideas*—where the delirium is apparently confined to the *actions* and *moral sentiments*;—whether in this form of mental derangement, the intellectual, the reasoning, and reflective powers are not more generally disordered than we have hitherto admitted? In many instances of mental disease, considered as uncomplicated illustrations of moral insanity, the malady *is not confined to the affective or motive faculties*. I do not maintain that such is *apparent* in every case of impairment of the moral sense or motive power; but I have detected the intellectual aberration in many cases brought under my observation as instances of pure derangement of the conduct, propensities, passions, appetites, and moral affections. In nearly all of them we may, upon a close logical analysis, perceive

co-existing with the moral disorder, a derangement of those powers of the mind by which we compare facts with each other, and mental impressions with external things; to speak with metaphysical exactness, and philosophical as well as philological precision—by which we *appreciate the perception of relation*. If we carefully investigate the cases quoted by Pinel, Esquirol, and Prichard, and referred to as *types* of moral insanity, we are irresistibly led to the conclusion, that the malady, as described by these authorities, was not in *any one case restricted to the affective or motive powers of the understanding*. The faculties of judgment, reason, and comparison, are represented in this form of insanity to be healthy and *intact*. Apparently, upon a superficial examination, they may be so; but do not the “tyrant passion”—predominant vice—overpowering emotion—loss of self-respect—brutality of conduct—prostration of all the more refined sensibilities of the mind—uncontrollable impulse—impetuous will—and the suicidal or homicidal idea, during the crisis of the paroxysm, *and contemporaneously with the commission of the act*, dethrone reason, and paralyze the operations of the judgment? Do not violent and ungovernable temper, impulsive emotion, and unreasonable conduct, leading to overt acts of what are termed moral insanity, suspend the exercise of the will, and interfere with the healthy balance or equilibrium of the *intellectual* faculties? In cases where the faculty of volition appears to be suspended, and the patient is unhappily the willing and facile slave of every wicked, sensual appetite and vicious propensity, and is guilty of most extravagant conduct—are, I repeat, the powers of *judgment, reason, and comparison*, the more exalted and intellectual functions of the mind, entirely free, unclouded, unfettered, and in a healthy state of activity? Is the “moral maniac” capable of pursuing an ordinary and healthy process of induction, and competent to exercise the powers of reason, comparison, and reflection, *quoad* the specific features of his so-termed “moral” disease? He may be apparently of sound understanding, able to solve with great rapidity a difficult mathematical problem; have great capacity for the ordinary business of life; may converse with ease upon points of science, art, and philosophy; and astonish the world by the tenacity of his

memory, the vividness of his fancy, the playfulness of his satire, the brilliancy of his wit, and the majesty and sublimity of his eloquence—all these elevated states of mind are compatible with *latent delusive ideas and intellectual disorder*.* Lord Brougham makes some pertinent remarks on this subject. When applying his able powers of philosophical analysis to this question, his lordship observes: “We cannot with any correctness of language speak of general or ‘partial’ insanity; but we may most accurately speak of the mind exerting itself in consciousness without cloud or imperfection, but being morbid when it fancies; and so its owner may have a diseased imagination, or the imagination may be diseased, and yet the memory may be impaired, and the owner be said to have lost his memory. In these cases we do not mean that the mind has one faculty, as consciousness, sound, whilst another, as memory or imagination, is diseased; but that the mind is sound when reflecting upon its own operations, and diseased when exercising the combination termed imagination, or casting the retrospect called reflection.” Then again, as to what is termed impulsive insanity, a form of disease generally considered to be unassociated with derangement of the ideas, I would ask, is it a fact that these cases are invariably unaccompanied by delusive impressions, or by a disturbance of the reasoning faculties? Admitting the existence of a morbid impulsive propensity, does it become absolutely irresistible and uncontrollable except during a crisis of delirium? It has been maintained, that at the moment of the impulsion an intellectual perturbation and positive derangement of ideas occurs. “We believe,” says a French writer, “that the doctrine of a temporary insanity, of a sudden eclipse of the reason at the time of the act, is a safer and more philosophical doctrine than the hypothesis of modern medical jurists, who assert that no monomania, whether homicidal, suicidal, or incendiary, can compel to the consummation of the act, without insanity in the ordinary acceptation of

* In many cases, designated as illustrations of moral insanity, I feel assured that undetected and unrecognised delusions often actually exist, influencing the conduct of the patient. I could narrate several instances of the kind. M. Marc mentions the case of a man, who for many years had been in the habit of licking the walls of the apartment with his tongue, until he had actually worn away the plaster. No one could imagine what was the cause of this perseverance in so painful and disgusting a habit, until one day in the author's presence he confessed that he tasted and smelt the most delicious fruit on the walls.—(p. 119.)

the term, or intellectual disturbance. We repeat, that we cannot admit this theory or principle of monomania with irresistible desire, and without delirium during the act, because it appears to us to be dangerous, inasmuch as it suspends the course of free-will, is destructive of the morality of human actions, and tends to favour impunity for crimes. For if the impulse be irresistible, and is unaccompanied by delirium during the act, what becomes then of free-will? In our minds, the disturbance of the reason will always be more comprehensible and conformable to the common-sense of mankind than a perversion of the will without delirium."

Having considered this subject pathologically, I would briefly analyze it *metaphysically*. In using the words "mind," "intellect," "understanding," we employ abstract terms to denote an aggregate condition of all the phenomena of intelligence, to describe the manifestations of *one and an indivisible essence*. In classifying, for the convenience of philosophical investigation, the mind into separate and distinct powers or faculties, emotions or passions, are we not oblivious of the fact, that this arrangement, classification, order, division, and subdivision, are essentially arbitrary, and that the principle, essence, and substratum of mind, is in itself a unit, and incapable of being subjected to such divisions and classifications? Many of the so-called faculties of the mind, the emotions and passions, which are spoken of as independent and distinct powers, are obviously only modifications of, or different modes of being or manifestations of, *ONE particular mental condition or state of intellectual relation*. "We cannot map out the mind as we can a country or a county, assigning to each town, province, or state, its separate controlling and free sovereignty. We are not justified in converting each faculty into a little 'independent mind,' as if the original mind were like that of the polypus, which, according to naturalists, may be cut into an almost infinite number of parts, each of which becomes a polypus, as perfect as that from which it was separated."* "I suspect," says Locke, "that this way of speaking of the faculties has misled many into a confused notion of so many distinct agents in us, which had their several provinces, and did command, obey, and perform several actions as so many

* Browne.

distinct beings; which has been no small occasion of wrangling, obscurity, and uncertainty, in questions relating to them." "The mind," says another eminent authority, "is formed susceptible of certain affections; these states or affections we may generalize more or less, and, according to our generalization, may give them more or fewer names." "But," he continues, "whatever may be the extent of our vocabulary, the mind itself is as independent of these transient designations as *He* who fixed its constitution—still continues to exhibit the same unaltered susceptibilities which it originally received; as the flowers which the same Divine Author formed, spring up in the same manner, observing the same seasons, and spreading to the sun the same foliage and blossoms, whatever be the systems and the corresponding nomenclature, according to which the botanists may have agreed to record and name their tribes. The great Preserver of Nature has not trusted us with the dangerous power of altering a single physical law which *He* has established, though he has given us unlimited power over the *language* which is of our own creation." May we not apply the same argument to the phenomena of life? We observe the principle of vitality manifested through different physical *media*; but whatever may be the character of the material tissue, or the special function of the organic structure through which life reflects its powers, we, as spiritual physiologists, maintain that these manifestations are only different *modes* or *states* of development of *one and the same principle*; that the life that manifests itself through the brain, lungs, stomach, and the heart, is identical and homogeneous in its nature and essence; the peculiarity of the physical organization affecting, as it undoubtedly does, its mode of being or action. Applying this metaphysical doctrine to the subject now under consideration, it must be evident, that in all the varied phenomena of insanity the same identical essence or principle is affected; that, without any exceptions, THE MIND—using this term in its liberal and philosophical acceptation—is in a state of disorder. I would, however, protect myself from the imputation of repudiating the great discovery of Gall, or of holding, with the spiritualists, that the principle of thought is susceptible of actual disease, apart from any abnormal state of the cerebral tissue. In all cases of mental derangement, the *manifestations* of the mind, and not the mind *itself*, are implicated; or, to speak

with a strict regard to the principles of cerebral pathology, the *physical media*, or different portions of nervous matter through which the intellect is developed, are diseased, and, as a necessary consequence, the principle of thought is disordered or deranged in its operations. As there appears a determination to discountenance the use of the term "moral insanity," I would advise the witness to avoid, upon all occasions, an ostentatious and unnecessary application of the phrase. If called upon to give evidence in cases of insanity, involving apparently the healthy action of the motive and *affective* powers, I would recommend the witness, when asked to state his opinion of the condition of the mind and the degree of responsibility in cases of this nature, to speak of the disorder as one implicating the normal state of the *mental principle*. In reply to the interrogatory—"Do you consider the prisoner at the bar of sound mind, and a responsible agent?"—I would suggest to the witness the safety of answering, to the best of his judgment, either affirmatively or negatively; bearing always in recollection, that in all phases and degrees of insanity, whatever form it may assume, *one* and the *same essence* is involved in the disturbance—that all are, strictly speaking, AFFECTIONS OF THE MIND.

(To be concluded in our next Number.)

AN ANALYSIS OF GUISLAIN'S WORK ON INSANITY.

NINTH LECTURE.

(Continued from No. XXVI., page 273.)

The complex forms of mania.—Twenty-three forms of mania, without counting several compound forms not described. There is, you will say, perhaps, a symptomatological baggage sufficiently heavy for the memory. But you will perceive that to group thus the phenomena of the disease is to render its study more easy.

Of general mania.—In general mania, polymania, the sum of mental activity is doubled, multiplied tenfold; every act is an extravagance, an exaggeration, a passion. The patient who now serves as an illustration desires, wills, exacts; he wishes for a thousand different things at once; he complains of the limits set to his will. He wants to go out. He will not stay in a place where he says he is surrounded with enemies. He proposes to purchase a certain property; he wants to demolish this wall. In melancholy, as we have seen, the will is as if paralyzed; the moral in a state of prostration, at least unless the phrenalgia be associated with mania.

The morbid excitation invades the domain of the ideas. It is always some new plan, some new demand. A flood of projects is poured forth: the patient talks night and day. One might imagine a column of ideas escaping by a valve which had held it captive. The speech is clear. Error is at the bottom; but the form is traced with precision. The phrases are often incoherent. The words are sometimes only sounds without meaning, vociferations, or blasphemies.

In melancholy the patient accuses himself. In this maniac, on the contrary, the patient, far from accusing himself, is a victim. He believes himself surrounded with enemies, plots, and conspiracies. You may have remarked that the personal pronoun has been displaced in his case. It is not *I* am unfortunate, as with the melancholic, but *they* have a spite against me. The transition from melancholy to mania is announced by this change in the application of the personal pronoun.

Now observe the violence, the fits of anger, of fury. The patient before you strides rapidly, his eye is fixed, his lips pale, he overturns everything, nothing but must yield to his violence. His attitude is haughty, threatening: his silence, like his vociferations, inspires terror. He deals out blows: he is seized. He resists: a struggle follows; he is shut up. Alone, he rends his clothes, breaks up his bed, seizes the fragments and beats the door. From a corner of his cell he defies all who dare to enter. At the end of some hours or days he is fatigued, and seeks repose.

In the midst of all these acts, the bodily movements are executed with remarkable harmony and suppleness. The muscular force is often increased to an extraordinary degree.

In mania, as in melancholy and ecstasy, the sleep is imperfect and irregular. Often the patient sleeps during the day, and sings and shouts at night. This condition reacts strongly upon the intellect, which it obscures. It is said that the patient understands his position, unless it be at the outset of his illness. He cannot believe in a disease of the mind.

The maniac is credulous, easily deceived: his judgment is enfeebled. Most frequently the aptitude for work is diminished, or absent. It only appears when the disease is on the decline.

The appetite increases; it is sometimes voracious: this is a pathognomonic symptom of mania. The increase of the appetite is almost always the indication of a coming maniacal attack. Some, however, refuse obstinately to eat.

Some maniacs drink copiously. In the greater number the stools are regular; but diarrhoea and constipation are observed. The urine exhibits nothing remarkable in tranquil mania. During the maniacal attacks, in cases of great agitation, the urine has often an inflammatory aspect; there is a deposit; the colour is very deep, and resembles the urine proper to the crises of gout. In some maniacs the attacks are announced by an incontinence of urine; when the disease diminishes in intensity, this involuntary flow ceases. In chronic cases, and especially in maniacs advanced in years, this symptom is of most unfavourable augury, indicating the transition from mania to incurable dementia.

Examine the pulse in the greater number of these maniacs, and you will find it of remarkable celerity. Most frequently the cerebral excitation may be measured by the rapidity of the pulse. Occasionally it is slow, as in some cases of melancholy and ecstasy, but then it presents a particular rhythm; every pulsation, even when the cardiac contraction recalls the physiological condition, presents a certain vivacity of a convulsive character. Seldom is there fulness or hardness in the pulse.

In recent cases, the carotid and temporal arteries beat with violence; the face of the patient is flushed.

In chronic cases the face and lips are mostly pale.

In recent cases in young and vigorous subjects the skin is moist, and even in the middle of the winter we are astonished to find it warm. Sometimes it is bathed in sweat, especially when the disease advances by fits.

There has been observed in insanity, and chiefly in mania, a particular odour from the skin, which has been compared to that of the urine of mice. M. Jacobi denies the existence of this specific odour; he attributes it to want of cleanliness. I can give you the most positive assurance that it is in many cases a reality.

Often the maniac grows thin; and frequently also his adipose tissue becomes loaded with fat, as soon as convalescence is observed.

In the generality of acute cases, the catamenial flow is suppressed; but it is sometimes regularly continued in chronic cases.

Progress of the Disease.

Mania may be continued, remittent, intermittent, periodical. It may recur at long intervals. It is acute or chronic. It is primitive when it arises apart from other phenomena. It is secondary when it succeeds to the functional phenomena.

Among the precursory symptoms may be observed instability of character, a disposition to embark in rash enterprises, to change one's condition, to overthrow to-day the project of yesterday.

The disease may commence by dreams. The patient thinks he sees torrents, precipices, blood, flames; he fancies he is pursued by robbers, by gendarmes.

Sometimes it is announced by pains in the temples, forehead, or occiput, which disappear in a few days.

Sometimes the symptoms begin in the chest, by a feeling of oppression in the region of the heart, by spasms, palpitations, trembling of the hands and arms, and lips.

Occasionally the disease seems to radiate from the abdomen; sometimes there are violent colic pains; the tongue is loaded with a yellowish coating; there is loss of appetite—or there may be vomiting, prostration; it might be supposed that the patient was on the eve of a serious malady.

Very often, and especially in periodic mania, the skin is the seat of an eruption, partly erysipelatous, partly roseolate.

The patient refers to his head an uneasiness which he cannot define. "It is odd," he says; he puts his hand on his head and cannot explain what he feels;

"I am driven in different directions;" "I hear bells;" "I hear voices." "Singular ideas come into my head." In a few hours his whole face is decomposed; he would not be recognised. At the end of some days he sleeps a little; he is better in the morning. He is still better in the evening; but soon a new attack breaks out. The disease grows distinct; the patient is irritated against those who surround him. A fresh calm takes place, another attack appears. Soon there are nothing but remissions, which vanish as the mania breaks out into cries and vociferations.

In some cases the invasion takes place without prodromata; it is sudden and violent.

The patient thus advances by starts towards a gradually increasing perturbation.

Mania terminates in different manners in health: by a temporary suspension; by prolongation; by an indefinite chronic condition; by a multiplication of its phenomena. It may end in a transformation into melancholy; into ecstasy; into delirium; into dementia; or by a manifestation of other diseases, as diseases of the encephalon, of the chest, of the abdomen; of febrile diseases; and by death.

In melancholics we have found exaltation at the approach of convalescence; in mania we find the reverse.

Mania, like melancholy, recurs by periodical returns; this is true of more than one-third of the number of maniacs. I do not think there is any regularity in these manifestations. It is especially in cases connected with epilepsy that the greatest regularity is observed.

The greater number of maniacs recover; according to my estimate, seven-tenths are restored to health; but sometimes this is only temporary.

In almost all the maniacs whose illness is protracted, there is observed a kind of cachexy, an emaciation, a pallor of the face. It would seem as if the mass of the blood had diminished, and that its colour had changed.

When recovery does not take place, the mania remains chronic, or changes its character, becomes associated with dementia, or passes entirely into this form, which is pre-eminently marked by a great incoherence of ideas.

I do not remember ever to have seen pure apoplexy in the course of mania.

Local paralysis, regarded as an accidental symptom, has been but seldom observed. The association with general paralysis is frequent.

Sometimes in the course of hyperphreny there supervenes a general and sudden prostration.

Death appears suddenly and unforeseen; this is especially the case in acute mania. But in many cases death is the consequence of a gradual extinction of strength, brought on by a marasmus which I will call cerebral.

TENTH LECTURE.

Of the alienations which may be comprised under the denomination of folly (folie).—*I have now to bring before you an order of phenomena of unusual appearance, which often present a special analogy with certain acts committed voluntarily with the intention of mischief.

These forms of disease have been but vaguely described. They have been referred to monomania, melancholy, and even to mania. I have already said

* However awkward the word may appear, we have thought it expedient to translate the word "*folie*" into "*folly*." The author attaches a peculiar pathological signification to the French term; and if that signification be, in like manner, extended for the occasion to the English one, our task of rendering the ideas of M. Guislain upon this subject will be facilitated. We must admit, however, that the compound "*monofolly*" has a strange sound. Coleridge apologised for the introduction of the word, psychology.

that it was my intention to give precision to the term "folly." I wish to constitute it into a distinct morbid genus.

It comprises various types: simple and special vesania; general and compound affections.

I shall call the first *monofollies*; the others *polyfollies*. However strange the association of this Greek root and French word may appear, I venture to propose it.

Several *monofollies* are extremely rare, so much so, that many very aged practitioners may have witnessed but few of these morbid forms.

It is not the exaltation of the intellectual phenomena that you will find at the root of the disease, as we have done in mania. We have to remark in folly, acts impressed with the character of oddity, eccentricity, sometimes of excessive cruelty—acts executed with deliberation in the absence of all motive or real passion. It is said, it is generally believed, that the insane who commit these acts proceed designedly and in consequence of an internal deliberation. Most frequently there is nothing of the kind. The idea remains healthy, and commonly has nothing to do with these vagaries. The disease represents a monomania of actions rather than a monomania of delirious conceptions. The patient is urged on, he knows not how or why. His will seems principally affected; not his will of passions, but his will of irreflective actions, his impulsive will.

Hence this kind of disease has been called *instinctive monomania*, the *madness of action*, *impulsive alienation*, *extraordinary impulse*. The absence of motive is not an exclusive fact in this alienation. But the intervention of a morbid thought, this complication of this form of insanity, is not constant; it does not constitute a fundamental element in this vesania. It is an active passion, in which the patient is driven irresistibly to execute deeds of a capricious will, and which do not bear the character of a true passion acting and reacting. Innumerable facts prove that the most singular and eccentric acts may be manifested without any perceptible disorder of the conception or of the imagination. Starting from this, Prichard has assigned to all the instinctive extraordinary impulses a place in his scheme of *moral insanity*.

The term *moral insanity* is not a happy one. It represents a mental disease, incomplete, in a rudimentary state, at least according to the opinion commonly enunciated; it often constitutes the initial form, the prodromic period of an alienation to become more complete hereafter. Folly, then, may constitute one of the forms of moral insanity; but this, as you have already seen, may also be either a melancholy or a mania; it is the absence of delirious ideas which gives to moral vesania its pathognomic colours.

Folly, therefore, is allied to the special impulses having a character of morbid irresistibility. Certain species and varieties of this morbid genus have been described under the denomination of destructive monomania, homicidal monomania, pyromania, &c.

Our predecessors recognised a variation of this phrénopathy, and they appreciated it better than the moderns; they described it under the name of *morosity*, from *morio*, buffoon, fool. They even created an *alienatio morio*, a *mania morio*, a folly in which grotesque actions predominate.

I therefore establish a distinction between mania and folly. In folly you will observe oddities in the actions, rarely a passionate exaltation. Most frequently the progress is slow and insidious. In mania, it is exaltation, animation, which characterise the disease. The maniac is loquacious, quarrelsome, and aggressive. In the fool (*fool*), the expression of the physiognomy is usually normal. His conversation is not remarkable for exuberance of words. You would call this man serious, quiet, taciturn. Patients affected with folly produce a totally different effect upon the crowd from that arising from the observation of maniacal acts, of an ecstatic, of a melancholic.

On a close consideration of folly, it seems to consist of reflexiform impulsions. It is not a convulsion, but in essence it resembles it. It is not a fitful muscular movement, but a vicious direction of volition.

On observing these singular patients, in discoursing with them, frequently nothing reveals a diseased mind; they are attentive, they conceive, calculate, measure probabilities and impossibilities; their memory is intact, they remember facts, persons, and dates.

In a crowd of situations which the moderns have designated as suicidal, homicidal, and other forms of monomania, the madman is no longer the representative of human force: he is under the dominion of his instincts.

There is a circumstance which deserves our attention, which is, that often the patient has the appearance of regarding the facts which concern him as if he were not the author of them; he does not trouble himself about them, or the consequences.

Why, you will ask me, insist upon these distinctions? It is because they possess a real utility in relation to prognosis. The characters of mania, more essentially primitive, more violent in their course, are also of more favourable augury. The characters of folly, on the other hand, less often initial, rather secondary, slower in their development, and more insidious in their progression, inspire me for the most part with exceeding mistrust, and are far from cheering in reference to the curability of the patients.

I have known patients who have said to me, "Something, I know not what, an electric force, perhaps, compels me to take up this book, or other object, and to throw it to the ground. I *must* lift up my arm. I *must* move that table, this chair. I undress myself without knowing why; I *must* act in opposition to my intentions." Others say, "There is in me some one who is not myself—who drives me and forces me to act."

I cannot venture to affirm that the unmarried are more subject to this affection than the married; but I have reason to believe that the predisposition is stronger in the former.

The symptoms proceed in the form of crisis, of fits, which are mostly manifested in an explosive manner. I am in the habit here of calling them rockets, from the sudden nature of their manifestation.

When these fits appear, they are usually accompanied by anxieties, vague terrors, hallucinations, agitation, and many acts which we also recognise in epileptics before the explosion of the convulsions.

At these moments, the patient kills his children, his father, his friends. He drinks boiling water. He throws himself from a height, or hangs himself. He takes a knife or razor and cuts his throat. He is rarely seen to destroy himself by the aid of fire-arms.

It is to one of these situations that some observers have given the name of *mania brevis*, and hence *mania instantanea*.

This impulsion has not always murder for its object; it occasionally breaks out in singularities, in childish oddities, in species of momentary distractions. These patients are for the most insensible to all stimulants. In the depth of winter, one of our patients perceives a finger numbed with cold. Having occasion to use a knife, he cut off this finger at a joint. He always said that he felt not the slightest pain during the operation.

A few days ago, I offered some snuff to a suicidal madman; he was in one of his lucid moments. "Is it not strange," he said, "that when I am well, a grain of snuff is enough to make me sneeze five or six times: now I take any quantity, and I cannot excite the sensibility of my nose; I do not sneeze at all?"

During the crisis the pulse is sometimes very slow, sometimes very quick. The skin is often bathed with sweat. But we cannot recognise in these symptoms the fits of an intermittent fever; it is rather neuralgic or convulsive fits that we should assume as points of comparison.

In this kind of phrenopathies, the *visceral functions* are scarcely influenced in a permanent manner, as is the case in melancholy, ecstasy, and mania.

Fantastic impulsions may also be developed in the course of almost all the phrenopathies. Thus the refusal to eat is present in melancholy, the whim of dressing up in odd costumes in mania, and automatic acts are seen in dementia.

Regarded as an elementary form, folly, therefore, is not a grief, an anger, nor a disturbance of the reason. In this vesania, the morbid impulsion seems to start from other centres than those in which the passions are developed, and where the ideas reside.

Of the different forms under which folly may present itself; their associations with other phenomena. Special follies.—We have here patients impelled by an irresistible desire to bite, or tear with their teeth, everything in their way. We shall name these the *biting fools*.

This condition seldom belongs to an isolated impulsion; it generally forms with other kinds of vesania a compound alienation. We have here several *rending* madmen. There is a propensity to tear or cut everything to pieces. This may be a real *rending monophreny*, when the desire of destruction presents a dominant character.

We might call *mutilators* those madmen who turn against themselves their irresistible want to mutilate living beings. It is only observed in exceptional cases.

Self-murderers.—In a nosographical point of view, I recognise:—

A. A pure suicide, a *suicidal monofolly*, consisting in a blind, irresistible impulsion.

B. A *suicidal monomania*,—that is, a mania with suicide, when the patient destroys himself in a fit of rage.

C. A *suicidal monomelancholy*.

D. A *delirium with suicide*, as we shall see further on.

Suicide, as I understand it, may constitute a radical symptom, an essential disease; or else it is only an epiphenomenon, appearing in the course of another vesania. This latter form is most frequently observed in melancholy. Melancholy, moreover, is at the bottom of almost every form of suicide. Suicide may be manifested in dementia. It may also present itself, without the slightest disorder of the ideas, in *suicide without delirium*.

Suicidal epidemics have been observed.

In some cases, the suicidal desire is constant. It may be remittent, intermittent, or periodical. It may be propagated by the influence of imitation. The species of moral contagion which distinguishes this affection has long been recognised. Esquirol and Falret first called attention to it.

Clinical examination of a suicidal patient.—How is the suicidal tendency observed in this patient? I will tell you. After some months of sadness the affection broke out suddenly: the patient was as if hunted; he is still driven by an internal force. He mostly speaks to you with perfect sense. He talks of his disease, and explains how he is carried away in spite of himself. You heard him say, "Whilst I am talking to you, I feel my head working." Soon, he will speak no more, he will look at you with a pre-occupied air, and will appear quite beside himself. The fits last some hours; he comes to himself, remains calm for some hours longer, for a whole day, until the morbid agitations return, and finish by becoming continuous.

Have you observed the singular look of this patient, and that deeply-grave and serious expression spread over his countenance, the colour of his skin, the tension and the pallor of his lips? And then his conversation. There is nothing more striking than the integrity of his reason. Often these patients themselves request that all the precautions their condition requires should be taken. In the midst of all these symptoms there is frequently an oppression of the chest, which deserves all the attention of the practitioner. It is accom-

panied at times by excessive paleness, lividity, and a pulse remarkable by its slowness and fulness, and in certain cases by its extreme frequency.

The other day I asked the young man whom you see there—he is convalescent from a suicidal folly—if he had the consciousness of the first attack of his disease. Yes, he answered, perfectly. It began by a stifling, a pain at the bottom of the chest; the suffering was great; it cut short my speech; but it did not last long: it came back, however, and at every return, it seemed to me as if I could not see; everything around me disappeared; I heard nothing. I thought something dreadful was to be done to me, and I ran straight to the river. I did not feel the water, and what passed there I know not. I must have been picked up, since I am still alive.

The organs of the chest, therefore, play an important part in suicide; the heart often seems to be in a quite peculiar condition. The alterations of the heart, as I shall prove, the white spots on its external surface, the morbid granulations of this surface, the adhesions between the two laminae of the pericardium, have presented themselves to my observation. I have been driven sometimes to seek some abnormal condition of this organ in its irritability, in its nerves, in its structure.

You may read with profit what Fr. Nasse has said concerning the influence of the heart upon mental diseases.

This condition is sometimes connected with the critical age, the appearance or suppression of the catamenia, or of hemorrhoids, with a gouty cachexy, with an abnormal constitution revealed by a dark brown complexion, dark rings round the eyes, the projection of the belly, sluggish bowels, dark-coloured urine, and general thinness.

Suicide is often associated symptomatically with all the kinds of destructive folly. But a profound moral grief is almost always detected.

In Belgium this vesania is very rare. In the united establishments of Ghent it is not observed five times out of 100 admissions, always excepting those who suffer themselves to die by refusing food.

In France, out of 34,000,000 of inhabitants, there were 30,000 suicides in eighteen years.

The *homicidal monomania* of Esquirol is, nine times out of ten, the effect of a motiveless impulsion, which drives the patient to commit murder.

Homicidal madmen believe that they must act so; they kill, they say, because they are driven to it.

In a diagnostic point of view, it is essential to mark the distinction that exists between the homicidal hyperphreny and the folly of the same name. In the first case, the patient reveals in his features, in his attitude, all the characters of an overflowing passion of rage; he howls, overturns, destroys; his eye is on fire. In homicidal folly, it is quite different. We behold a patient who is taciturn, anxious, pale, indifferent, acting without anger, without fury, but who evinces the marks of an irresistible impulsion.

Homicidal folly may be a simple vesania.

But can a man, without presenting any prelude of illness, suddenly be carried beside himself, and cut off heads, arms, burn, strangle, without offering any other symptoms than a morbid perversion of the impulsive will?

Reason refuses to believe in such a state, and yet eminent men, among others Esquirol, assure us that such cases are real, but that they are rare. For my part, I have not yet met with destructive monophrensy without accessory symptoms.

During the fits, homicidal folly becomes complicated with a peculiar alteration of the features, and an extreme acceleration or retardation of the pulse.

Most frequently this alienation is a compound state, and is associated with transitory delirious ideas. The patients believe themselves inspired, they hear voices, entertain fears, and nourish hatred against their best friends.

Homicidal folly is rarely a transitory phenomenon; it is generally permanent.

It is in the category of destructive madmen that we must class certain patients, to whom I shall give the name of *Necrophilists*.

Mental pathologists have adopted as a new form the case of the sergeant Bertrand, the spoiler of graves, of whom the journals have recently spoken. But the ancients, in speaking of lycanthropy, have cited examples with which this case may be connected.

There is a variety of destructive folly, the *incendiary monomania* of Esquirol, to which Marc has given the name of *pyromania*, and which we will call *pyro-folly*.

This kind of vesania is rare; but there are at this moment three patients here, transferred from the prisons, presenting this affection; they had been accused before the tribunals for arson, and sent here as insane.

This folly is very rarely seen as a partial alienation; it is generally associated with other pathological elements.

ELEVENTH LECTURE.

We cannot avoid recognising in the patients who have been the subject of our study, an abnormal, diseased condition of the power which commands the actions. It is chiefly the will that is affected.

In the patients whom we shall see in the sequel, this condition of the impulsive forces will be found under other forms, with other results, but always preserving the eccentric, irreflective, unreasoning character, which I have said to be the fundamental symptom of the pathogenic gamut of folly.

Some fools are obstinate to a degree which cannot be conceived by those who have not been in contact with them. They refuse to change their linen, to sleep in their beds, to wash,—indeed, they resist everything they are asked to do. This is the *folly of opposition*.

The dumb constitute a remarkable type of the insane. One of our female patients obstinately refused to speak for three years: through refusal to eat, a state of marasmus had slowly come on. The sister Sylvia, the matron who had charge of her, said to her: "You may keep silent, if it suits you; but if you persist in not speaking, you will not live long: call me when you feel the approach of death." Shortly after, in the middle of the night, she awoke the sister, who was sleeping in the same room, crying out: "Come, come; I am dying." In a few minutes, she expired.

Sometimes there is not an intellectual incapacity but a caprice, a morbid whim.

Phrenopathic dumbness presents different varieties. I often observe it succeeding a long period of incubation, characterised by grief. Sometimes it is met with as a transitory symptom in a group of other phenomena. I have recognised it as the type of a monomania which I will call *mutomono-folly*.

There are important distinctions to be drawn in regard to this vesania.

a. In incomplete ecstasy, there is an impossibility of speaking.

b. I have known men, who, after a typhoid fever, have been affected with an impossibility of speaking.

c. In melancholy, patients frequently will not answer when they are spoken to.

d. It is sometimes difficult to distinguish the phrenopathic dumbness from deaf-dumbness. But the state of the hearing assists the practitioner.

A fasting madness.—The refusal to eat is a symptom often met with in mental alienation. It is, so to speak, a variety of the preceding forms of opposition, and the refusal to speak. The refusal to eat is in every case a serious indication. It carries many patients to the grave by inducing a special

affection, which, as I have shown, is a pulmonary affection connected with a general vitiation of the blood.

Once only have I found a state of complete *mono-sitophobia* apart from all combination with other symptoms of alienation. I am speaking of a young person, who, in consequence of a moral cause, a wound to her self-esteem, evinced a repugnance for every kind of food. This state degenerated into absolute refusal to eat, and finished by exhibiting itself under the form of a partial mental alienation. It is one of the most curious cases I have ever witnessed. For a long time the condition of this patient was looked upon as the result of an affection of the stomach, an anorexia. Her unconquerable obstinacy in refusing nourishment, her progressive emaciation, at length opened the eyes of her parents, and she was sent to me. The success of a moral treatment energetically pursued, followed by the recovery of the patient, testified to the justness of the diagnosis.

I shall have an opportunity of showing you the reasons which lead me to believe that in the refusal to eat, the eighth pair is morbidly affected.

This vesania is rarely a simple affection.

We have here some *daubing* madmen, who, if allowed, would do nothing but daub the walls with grotesque figures.

There are *hiding* monomaniacs, who conceal everything that comes in their way. There is also a mania for theft: this resembles criminal theft. *Cleptofolly* is usually observed as an element of association, or a transitory phenomenon in the alienations with exaltation of the passions. It also characterises the decadence or obliteration of the faculties of the intelligence; it is met with as an epiphenomenon in dementia, in idiocy, and epileptic convulsions. This morbid form is never observed in melancholy or in ecstasy.

Here is a madman who is incessantly digging the earth in the garden. I have entered his disease under the name of *talpafolly*. His proceeding resembles the action of the mole. It is not the first time that I have observed this phenomenon.

We have here fools addicted to *oratory, declamation, monologue, and dialogue*. Some affect to speak languages they do not understand. I have met patients who always repeated twice the same phrase.

There are *shrieking* and *howling* madmen. Others imitate the *song of birds*, the *mewing* of cats, or the *barking* of dogs.

These affections have often an intimate relation with hysteria. They even constitute diseases of transition, mixed conditions, phrenopathies on the one hand, a subconvulsive state on the other.

Gesticulating madmen.—Sometimes folly constitutes almost a variety of chorea. I have brought before you some patients who perform without ceasing the most singular movements of the mouth, tongue and face. This is *mimo-folly*. The patient to your right is a striking example: for four years that he has been here, he has never left off executing a fantastic contraction of the muscles of the left cheek.

Sometimes they preserve a crooked attitude. It is in vain that you offer them a chair, a stool, or a bench.

There is in the asylum a girl who for eight months has never opened her eyelids.

Fantastic automatism is often the prelude or the accompaniment of dementia.

When in the course of a mania or a folly, the intellectual functions undergo insensibly a subtraction of energy, when there is a progression towards dementia, there is often observed a quite peculiar excitation in the gait, in the gestures, in certain acts. These acts, these gestures appear under an automatic form. There is in reality an antagonism between what have been called for some time past the instinctive acts and the intellectual acts. In proportion as the latter decline, the former become exalted.

It is then especially that we remark the balancing of the body, the act of netting, a species of carphology; the fancy for stripping naked.

There are fools who present the phenomena of hysteria, of catalepsy, of epilepsy. Epilepsy, however, belongs more especially to mania than to folly.

INSTITUTIONS FOR THE INSANE IN PRUSSIA, AUSTRIA, AND GERMANY.*

THIS volume contains an interesting record of a very extensive personal examination of many of the numerous institutions for the insane in Prussia, Austria, and Germany.

Familiar as we have become with all the prominent hospitals for the treatment of mental disease in Great Britain and France, only a limited number beyond these countries have been seen by any of our professional men, who have visited Europe for the purpose of profiting by the improvements which, within the last twenty or thirty years, have been introduced into most of these institutions. "A general impression appeared to prevail, indicated, it is true, more by negative than positive signs, that, aside from the countries mentioned, the nations of Europe had made but little progress in this department of the profession, and hence could furnish us nothing commensurate with the labour and expense necessary to its acquisition," and yet the literature of the Germans on this branch of medicine is able and voluminous. Much of it is, perhaps, unprofitable, as being devoted to a zealous advocacy of specious theories, but still containing a great amount of valuable information, and exhibiting very strikingly the talent and industry which, in that region, are devoted to the study of mental diseases.

Various institutions for the care of the insane, too, are to be found throughout these countries, which have a deservedly high character for their liberal arrangements, and the admirable manner in which their whole service is performed.

During the summer of 1849, Dr. Earle visited many of these institutions, under peculiarly favourable circumstances for obtaining a knowledge of their actual condition. Long devoted to the study of diseases of the mind, and for several years engaged in the superintendence of a large American hospital, he went abroad with a degree of practical knowledge of the subject, and a familiarity with the wants of such establishments, which rendered him well qualified to judge of the excellences, as well as the defects, which are to be found in abundance in the different German institutions.

The first chapter of the work before us is devoted to a brief history of insanity in Germany, of the German periodical and other literature on the subject, and an interesting notice of the prominent men who have been distinguished in this speciality—which, although receiving only a brief notice at our hands, will well repay an attentive perusal.

The following estimate of German hospitals, as compared with our own, is interesting:—

"A large proportion of the buildings occupied as hospitals or asylums for the insane in Germany, were formerly monastic establishments. Their architectural arrangements are not only of a former age, but were adapted to a different purpose, and hence are less convenient than most of our institutions. Still, their conversion into asylums for the insane has already been productive of at least one advantage. It has accustomed the officers of these institutions to large

* Extracted from No. 54 of "The American Journal of the Medical Science," edited by Dr. Isaac Hay. "Institutions for the Insane in Prussia, Austria, and Germany." By Pliny Earle, M.D., one of the Visiting Physicians to the Lunatic Asylum of the City of New York, &c. Utica, 1853. 8vo, pp. 229.

rooms, so that, in the construction of new buildings, the principle of providing accommodations for the greatest number of patients in the least possible space does not enter into consideration. It is really a delightful treat to see the large, well-lighted, and airy corridors of Eichburg and the asylum at Halle. The number of cubic feet of inclosed space in the principal German institutions is probably not less than twice as great, in proportion to the number of patients, as those in the United States. Such asylums as have been recently erected, and specially designed for the purpose—as, for example, those of Halle, Illenau, and Eichburg—are great improvements upon the others, and yet, in point of convenience, are unequal to some of ours. In their asylums generally, the apartments for patients have not that finished aspect of comfort which is found in many of the American institutions. This is particularly owing to the universal absence of carpets. Yet, relatively to the prevailing customs of the people, they are probably as well furnished as ours. In the conveniences of the kitchen, the laundry, and the means of distributing food throughout the house, they are inferior. Cooking is rarely done by steam. I saw no wringing-press, and no dumb-waiter. Mechanical appliances for the purpose of bodily restraint are probably somewhat more extensively used than upon this side of the Atlantic.”

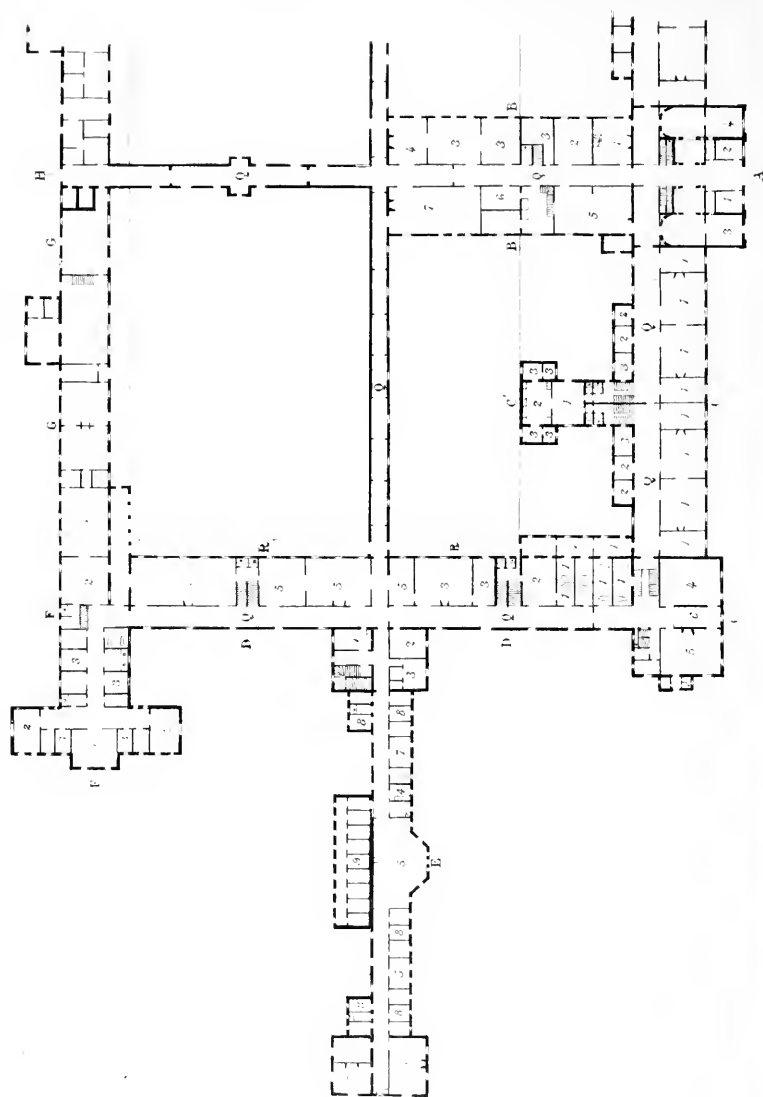
It appears that, during this visit, Dr. Earle found several establishments in which he was shown through only a portion of the wards, and occasionally he had no opportunity of seeing those for violent patients. We trust few, if any, American superintendents can be found but that will cordially agree with Dr. Earle, that when a professional brother, engaged in the same speciality, visits an establishment for the purpose of becoming familiar with its arrangements, it is a duty, and ought to be a pleasure, to conduct him through every ward, and to throw open every part for his inspection. The credit should be given such a visitor that he comes “to learn the advantages of the institution, not to seek for demerits or matters for cavil.”

In regard to moral treatment, Dr. E. considers the German asylums fully equal to those of the United States. “In the most important point of all—if reference be had to curative treatment, or the quietude, order, and hygienic condition of the patients—that of manual employment for the inmates, they are superior. The radical source of this superiority lies, undoubtedly, not in the more ardent wishes, or the greater efforts, of their superintendents for the welfare of their patients—for, in these respects, none can excel the officers of the American asylums—but in the education of the people, and the nature of the political governments under which they live. Obedience to authority becomes, by education, more a matter of principle or of habit. Furthermore, the asylums are more independent than ours, and the retention and management of patients more optional with the officers.”

Of the forty-nine public, and eight private, establishments of which mention is made, and a more or less extended description given, in the volume before us, seventeen were visited by Dr. E. They embraced those of Sieberg, Andernach, Eberbach, Frankfort, Dusseldorf, Hildesheim, Halle, Berlin, Sonnenstein, Leubus, Brieg, Vienna, Hall, Giesing, Wimenthal, Illenau, and Stephansfeld. Nine of these are among the thirteen which Dr. Julius calls the best in Germany.

Want of space prevents our giving a more extended notice of the author's visit, or referring to the many interesting facts and judicious criticisms scattered through the volume. We can heartily commend the work to the attention of all who take an interest in the insane, or are disposed to become familiar with the views of prominent German physicians on this important subject, and to learn from a competent observer the actual condition of the various institutions which, in that wide and populous region, are specially devoted to the treatment of the various forms of mental disease.

ASYLUM FOR THE INSANE AT MBERENBERG, NEAR HAARLEM, HOLLAND



EXPLANATION OF THE PLAN.

[Reduced from a plan kept at the Asylum. Advantage has also been taken of the description given to M. Parchappe's work; several errors in that description have, however, been corrected by information recently obtained by the writer.]

A. *Building for the resident officers.* *&c.* (3 stories.)

GROUND FLOOR.

1. Parlour.
2. Porter's room.
3. Steward's room.
4. Superintendent's room.
- 1st and 2nd stories are devoted to the 2nd and 3rd physicians & other officers.

B. *Building for general purposes,* *(consisting of only one story.)*

1. Apothecary's shop.
2. Office.
3. Store-rooms.
4. Parlour.
5. Kitchen.
6. Dining room for servants of the kitchen and main building.
7. School room and room for entertainments.

C. *Apartments for the three upper classes.* (2 stories.)

GROUND FLOOR.

1. Dry rooms and parlours.
2. Rooms for the infirm.
3. Dining room for the attendants.
4. General room for *reunion* of the three classes.
5. Work room.
6. Dormitory for old and infirm.
7. Single bed rooms. 1st story contains two sets of bed rooms separated by a corridor.

C'. *One storied building for the epileptic of the three upper classes.*

1. Dining room
2. Dormitory.
3. Separate rooms, of which one is padded.

D. *Division for the tranquil patients of the two lower classes.* (2 stories.)

GROUND FLOOR.

1. Bath rooms for this division and for the upper classes.

2. General room for washing and dressing for the lower class patients, on coming from the bath.

3. Parlour and dining room for the fourth class.

4. Servants' dining room.

5. Day and dining rooms for the fifth class of patients.

1st story contains dormitories.

E. *Wing added to the original building.* (2 stories.)

GROUND FLOOR. Division for patients more especially under medical treatment.

1. Wash room for quiet pauper patients.

2. Parlour for the tranquil of the fourth class.

3. Room for the upper attendant of the fourth and fifth class.

4. Baths and lavatory.

5. Dining room for the quiet.

6. Do. for the convalescent.

7. Dormitories (3 to 5 beds.)

8. Single rooms.

9. Seclusion rooms, of which one is padded.

1st story is for the quiet patients, and is divided on the same principle as the ground floor.

F. *Division for the sick and infirm of the fifth class, (including the dirty and some epileptics.)*

1. Day and dining room.

2. Dormitories of 6, 8, and 14 beds.

3. Single bed rooms

4. Baths.

G. *Workshops.*

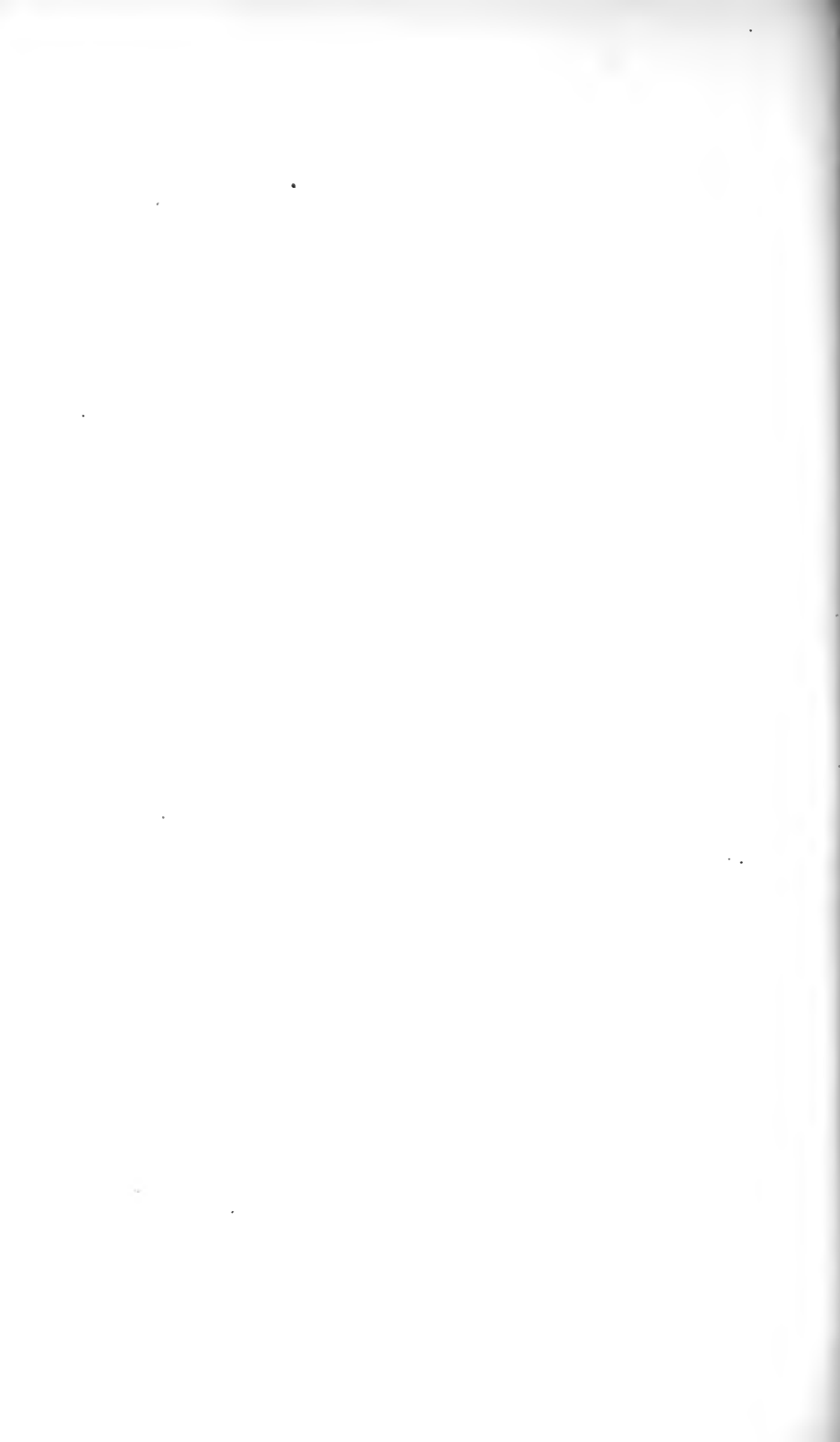
On the female side, laundry, drying room, and washhouse.

On the male side, joiner's and locksmith's shops, &c.

H. *Back entrance.*

q. Corridors and galleries of communication.

r. Covered galleries.



THE ASYLUMS OF HOLLAND: THEIR PAST AND PRESENT CONDITION.

BY DANIEL H. TUKE, M.D.,

Licentiate of the Royal College of Physicians, and Assistant Medical Officer to the York Retreat.

HAVING in the autumn of last year visited the principal asylums in Holland, and collected some information respecting their past, as well as their present condition, I conclude that a short report of them will not be uninteresting to the readers of your Journal.*

And first I will speak of the former treatment of the insane in Holland, and of the various Acts of the Legislature passed from time to time in regard to them.

The condition of the insane in Holland, half a century ago, was no less deplorable than in other countries; and I have no evidence of any movement in their favour at the period when Pinel did so much for them in France. "In our country," says Professor Schroeder van der Kolk, of Utrecht, "where no knowledge was neglected, and in which so many institutions and other proofs of our humanity and benevolence are to be found on the most magnificent scale, this most important care (that of the insane) and necessary part of humanity, has been altogether neglected, and in fact has hardly an existence. For although Boerhaave, that luminary not only of our own country, but of Europe also, had given most useful precepts in the treatment of those diseases, indicating a great and humane man—even he could not free himself from Galen's notions about black bile.

"Gaubius, however, in his first oration, 'Of the Regimen of the Mind, which is the Office of Physicians,' proved with so much eloquence, and so powerfully illustrated, the force which the body has over the mind, and the efficacy of medicine in correcting mental diseases, that I am surprised that our countrymen should have so much neglected his advice, and have been so ignorant of what other countries were effecting. What indeed formerly was the condition of maniacs in our country, is evident from those words of Swietenius, in which he relates, that there was a certain man among the Batavi celebrated in the treatment of the insane, who inflicted on these miserable creatures, when they were violent, stripes as he would have done on wild beasts, immersed them in water, chained them, and hungered them."

Political troubles interfered with the care and attention of Government, until Holland recovered her independence in 1813. In the following year—a period in England remarkable for an extraordinary reaction in favour of the insane—an Act of King William I. (Feb. 12) facilitated the admission of recent cases of insanity into the asylums, previously the receptacles for chronic cases only.

In 1816, the Government made a census of the insane, by which there appeared to be 1259 in the eight Northern Provinces—a return which had the effect of showing the necessity for a thorough inspection of all places in which lunatics were confined; no step, however, in that direction was at that time taken.

In 1825, another census was made, which gave a return of 1828 lunatics (868 men, 960 women), the population being 2,253,794, or 1 insane in 1232. Of these 1828, 702 were confined in 47 distinct places—prisons, workhouses, poorhouses, hospitals, &c.; only 23 of these abodes being houses specially for the insane; and not one really and truly adapted to their treatment.

* The writer has already comprised an account of the general result of a visit to the Continental asylums, in an essay now being published by the "Society for the Improvement of the Condition of the Insane;" but the limits of that essay did not allow of a particular notice of individual asylums.

The war with Belgium, from 1830 to 1833, appears to have again interrupted the endeavours and investigations of Government relative to lunatics. Private efforts, however, were not wanting at this period; the directors of the Utrecht asylum commenced the work of practical reformation in that establishment—and this attempt may be regarded as the *point de départ* from which all subsequent improvements in the Dutch asylums proceeded—exhibiting as it did the successful results of an improved system of treatment, and attracting the attention of not only medical men, but of the Government also, to the advantages of such a system, and the necessity of a thorough reform in the asylums in Holland. This asylum was visited in 1836 by Frederick Prince of Orange, who expressed his astonishment at the order and tranquillity prevailing there.

To Professor van der Kolk, the physician to the asylum, belongs the merit of having pioneered the way in this noble cause; and not content with his practical labours at the asylum, he made an inspection of the condition of the Dutch asylums, and in 1837 delivered an oration, "*De debita cura infaustam maniacorum sortem emendandi eosque sanandi, in nostra patria nimis neglecta.*" In this he eloquently depicts the deplorable condition of the insane in his country even at that time, and earnestly adjures his countrymen to redeem their character, by making a suitable provision for their insane population. Indeed Professor van der Kolk must be regarded as the Pinel of Holland. The following quotations from his address, cannot fail to be of interest to the reader; they exhibit the condition of the Dutch asylums in 1837, and bear ample witness to the zeal and humanity of the orator:—

"This [deplorable] state of things was common to us and other countries, but that which gives us so much cause for regret is, that at the time when, in most parts of Europe, the medical treatment of the insane was greatly ameliorated, in *our* country there was scarcely any improvement. Now, there do exist here and there private asylums in which the insane are kept and humanely treated, but they are generally committed to the care of private individuals, entirely ignorant of the medical art, of which notwithstanding these diseases form the most delicate and difficult part. But in other places (and these by far the greatest number) they are shut up in narrow cells and dungeons, no better than in the time of Swietenius; or they lead a miserable life, mixed up with prisoners and thieves. Should ever any return cured from these receptacles (which is hardly ever the case), the fact affords a most forcible testimony—the strongest proof indeed—what great obstacles, greater in short than the disease itself, Nature is sometimes able to surmount. On the doors of these dungeons there might be appropriately inscribed those words which Dante inscribes on the gates of the Infernal City:—

"*'Lasciate ogni speranza voi ch'entrate.'*"

In English:—

"All hope abandon, ye who enter here!"

In tracing the progress of the subject, the orator alludes to an essay written by Dr. Guislain, for a prize offered by the College of Medicine at Amsterdam, and which was published by it in 1826. This first attempt to rouse public attention to the subject was frustrated, it is thought, by the magnitude and expense of the establishment proposed—which alarmed the Dutch mind. "I therefore rejoice exceedingly," he continued, "that I should have lived to see even in our country an establishment for the cure of the insane, which may be compared to those which exist in other countries. In our city, first, this was established, or rather a most pestilent cancer was changed into an institution of this salutary character. * * * We have, therefore, something to rejoice at, in which all unite who have learned the principles of charity to mankind, which are inculcated by our holy religion. But we have this additional cause of rejoicing, that, with the Divine blessing, not less than 60 persons have de-

parted cured from our establishment during the last three years; once more in the enjoyment of the gift of reason, restored to their country, their friends, and themselves. In this also we may rejoice, for I speak to you my friends, who are united with me in the care of this establishment; we have desired no other reward for our labours but this rejoicing, this Divine blessing, and the consciousness of right actions. Let us then press forward with fresh ardour, my most esteemed coadjutors, and God will thus answer your desires. He who, inspired by love to his fellow-men, spends his time and his strength in alleviating their calamities—he has not lived in vain, he has remained at his post, and fulfilled his calling; he has obeyed the precepts of the God of mercy.” * * * *

He then refers to the large number of other institutions for the good of humanity, and alludes especially to one—

“In our time a society has been formed by men acting under the most humane feelings, and under the auspices of the King, for the benefit of thieves and other criminals; which proposes, by inducing them to amend their lives, to fit them to return to society—who does not admire such an effort? But do we see any society formed for the care of the insane, with equally disinterested motives? Yet they are contaminated with no crime. Is their cure more desperate than that of thieves? Why then do they mourn without help, without alleviation, without being thought worthy of any amendment of their lot? Why is cruelty and indignity often their portion, and this among people the most refined in manners, the most cultivated in intellect—a nation professing Christianity? What heart is there so hard that is not moved with pity at the sight and contemplation of these unhappy beings, who ought to be the objects of assistance and kindness, and not of punishment, and with the highest indignation against those who perpetrate these things—who permit them—and who regard all this inhumanity as a matter of amusement or derision?”

After stating that seclusion is not the only thing necessary, but that to this, medical and moral treatment must be added, calculated to deliver patients from this malady and restore them to their friends, he exclaims:—“Humanity—if there be any—demands it; the love of our race—if it has an existence—demands it; the Christian religion no less demands it, which represents love and charity as the highest virtues, and inhumanity and cruelty as the worst of crimes. Which of us, I ask, would not call him a wretch, and avoid him as he would any other plague, who should be so lost to a sense of humanity that he should refuse to care for a father, a brother, a son, or any other relative, or unfortunate friend depressed by heavy grief and sorrow, and deprived of all health, and not only should deny him every comfort and assistance, but also should shut him up in prison lest he should be a burden to him! Nevertheless there are and were melancholics, and these not a few, to whom this misfortune has happened. For this disease depresses the mind and the reason itself, and induces despair; which deplorable condition increases by the unkindness of men, and what is more, is rendered perpetual, until by the compassion of God and by death, their miseries and the cruelty of men are destroyed.

* * * * * I have already touched on the opprobrious treatment resorted to by the rustics to whom they have been confided, of the beatings they have endured, of the chains by which they have been galled, and of the dungeons and prisons (*careas et carceres*) in which they have been immured. With my own eyes have I seen maniacs shut up for fifty years, in caves into which neither the light of the sun nor the breath of heaven could enter. I have seen a female maniac whose joints had been rendered incapable of motion by ankylosis, consequent on being constantly retained in one position by fetters. Her mind was restored, but she deeply bemoaned the total loss of bodily power she had sustained. Who that sees such things as these can refrain from tears?”

In 1838 another census was made, resulting in a return of 1925 lunatics

(931 men, 994 women), the population being 2,583,271, or a proportion of 1 to 1336. Of these 1925, 826 were confined in 26 houses of a very wretched description; and the attention of Government was afresh directed to the necessity for stringent legislation—chiefly at the instance of the Utrecht professor. And in 1841 (May 29) an Act was passed for the purpose of reforming the abuses of asylums, which has been of so much service in achieving its object, that in ten years all unfit houses of this description have been abolished. In the same year also two Commissioners in Lunacy were appointed, one a medical man, (Professor van der Kolk), and the other a lawyer connected with the Home Department (M. C. T. Feith); it is much to be regretted, however, that they were invested with very limited powers, and were very insufficiently remunerated. Still they had full power to inspect all asylums, and report on their condition to the Minister of Home Affairs. They themselves deserve the thanks of their country all the more for having worked as they have done, notwithstanding the smallness of their salary, which rendered it necessary for them to continue their professional avocations, the one at Utrecht, the other at the Hague.

In the year following their appointment, the Commissioners made a tour of inspection, and found 923 insane persons, confined in 32 houses; those of the provinces of Limburg being now included in the number. Of these 32, only 3 (the asylums of Utrecht, Zutphen, and Deventer) deserved approval—the remainder being found totally unfit for the reception of the insane. The result of this Report was, that Government ordered a large number of them to be immediately closed, while the rest were left to the more gradual influence of the reforming Act of 29 May, 1841. Of the provisions and working of this Act, we may here briefly speak:—Art. 2 divides all residences for the insane into—A. Medical asylums for the cure of the insane, and B. Residences for the confinement of chronic cases. Now, on the report of the Commissioners of the unfitness of any house for the medical and moral treatment of the insane, they were classed under division B.; and new admissions into them were rendered extremely difficult and tedious by the regulations of the Act. On the contrary, every facility was given to the admission of cases into the medical asylums (class A).

In addition to this, Art. 3 of the Act forbade the establishment of private asylums; even two insane persons were not permitted to be received into any private house.

Such was the influence of the articles of this Act, that, on the 31st of December 1850, only six houses for the confinement of chronic cases remained, the total number in which only amounted to 51; and these the Commissioners found to be treated with kindness and attention. It appears that before long these six houses will also be closed, and that what are called “medical asylums” will then only exist.

This Act also provides by its 5th Article for the care and treatment of the insane paupers by each province; and it enacts that “the States of those Provinces in which it is found impossible or unnecessary to establish a ‘medical asylum’ for the treatment of the insane, shall contract for their insane with the committees of one or more medical asylums in other provinces.” This article has, however, been erroneously interpreted by many of the provinces, and they have made such contracts with distant asylums, when it was their duty to have established asylums in their own provinces. Owing, therefore, to the great distance of the asylums contracted with, the number of the insane sent has been quite disproportionate to the insane population, and, as the Table will show, has left a large proportion still only provided for by their friends at home.

The following tabular account* of the number of insane in Holland, and of

* See the last Report of the Dutch Commissioners in Lunacy, 1852.

the asylums existing for their care, will be of interest to the reader. From it the proportion of the insane to the population appears to be nearly 1 in 1000, but it is more than probable that subsequent statistical inquiries will prove the insane population to be greater than this. Professor van der Kolk informed me that he believed 1 in 800 would not be too high a proportion. The table also shows that there is, properly speaking, only one provincial asylum, that of Meerenberg, for North Holland, the erection of which owes most to the philanthropic exertions and rare intellect of the Governor van Ewyck van der Bilt, and the liberal voluntary contributions of the citizens of Amsterdam.

TABLE,
Showing the Provision of the Provincial Governments in Holland for their Insane Population, and the general Condition of the Medical Asylums on December 31st, 1850.

Provinces.	Population on Jan. 1, 1850.	Total of Insane, calculated at 1/1000 Inhabitants.	Insane in Asylums.	Insane <i>not</i> in Asylums.	Number of Asylums.	Situation of Asylums.	Where there is a Resident Medical Superintendent.	Where the Asylum is Provincial.
Drenthe . . .	83,269	83	9	74 or 89 per cent.				
Groningen . .	188,806	188	37	151 " 80 "				
Friesland . . .	246,907	246	50	196 " 79 "				
Zeeland . . .	160,073	160	42	118 " 73.8 "				
Limburg . . .	205,481	205	55	150 " 73.2 "				
Noord Brabant .	396,845	396	116	280 " 70 "	1	In Maastricht.		
Overijssel . . .	216,274	216	67	149 " 69 "	1	" 's Hertogenbosch.	1	
Gelderland . .	370,560	370	142	228 " 61 "	1	" Zutphen.	1	
Utrecht . . .	140,347	149	81	68 " 45 "	1	" Utrecht.		
						" the Hague.		
						" Delft.		
Zuid Holland .	562,354	562	338	224 " 39 "	4	" Rotterdam.		
						" Dordrecht.		
Noord Holland .	476,665	476	326	150 " 31 "	2	" Amsterdam (Jews).		
						" Country seat, Meerenberg.		
Totals . . .	3,056,591	3056	1263	1793 " 59 "	11	Only one in the country.	1	Only in Noord Holland.

Since December 31st, 1850, Friesland has opened an Asylum within the town of Franeker, and to this Asylum, as also to those in Utrecht and Dordrecht, a Resident Medical Superintendent has been appointed.

Before Meerenberg was built Dr. Everts, its present superintendent, had done much at the Deventer Asylum in the care and treatment of the insane; and I must not omit to mention as deserving of all praise the efforts made under very disadvantageous circumstances by G. E. V. Schneevooft, physician to the General Hospital at Amsterdam (Buitengasthuis), a few wards of which were devoted to the treatment of about 200 insane. Dr. Ramaer also has done much for the cause of the insane in Holland by his labours at the Zutphen Asylum, and by his published works. Credit also is due to him for having started a Psychological Journal, the first which has appeared in his country.

It was, as I have said, in the autumn of 1853 that I visited Holland. I will now—after this rapid sketch—proceed to briefly describe the asylums I saw, more particularly that of Meerenberg, which may be regarded as a model asylum in its construction as well as in its internal arrangements. The reader must excuse the imperfection of the following notes, being extracts from letters hastily written to my father, Samuel Tuke, of York.

ROTTERDAM.—“I had hoped to find at Rotterdam a recently erected asylum for the insane, and being in the first instance conducted by the commissionaire to the General Hospital by mistake, I concluded that my anticipations were correct. But my disappointment was great when I found that the splendid new building I had arrived at was not for the insane—a disappointment still further increased when I subsequently was shown the veritable asylum, an old building in the heart of the town, affording a very indifferent accommodation for its inmates.

“I was conducted over the house by the director, who, unhappily, is not a medical man; unhappily for the interests of the patients, as also for the purposes of my visit. Subsequently, however, I met Dr. Charenté, the visiting physician to the asylum, a man of kindly disposition, and very willing to give me any information in his power to communicate. It appears that a new asylum is contemplated, but the funds are not provided, nor is the plan designed.

“There are at the present time 117 insane persons in the establishment. Of these 49 are men and 68 women. Their condition was certainly not very satisfactory; the amount of restraint by means of the camisole and the coercion chair very considerable; and several of the rooms for the violent class were damp, gloomy, and in all respects unfit for the reception of a patient. At the same time, I should be very sorry to convey too unfavourable an impression; I did not see anything that could be called inhumane treatment, and many of the wards were clean, and the patients engaged in in-door employment. Owing to its locality, farming, or in fact any out-door employment, is precluded. As to the classification of the patients, it does not appear to extend beyond the noisy, and dirty; and the tranquil. Nine men and seven women are what are termed ‘dirty patients.’

“I find that during the ten years ending 1850, 397 patients were admitted into the asylum. Of these 138, or 34·9 per cent. of the admissions were discharged cured—a proportion which although low as compared with many well-conducted asylums, is not so low as to justify any conclusion reflecting very unfavourably on the treatment pursued.

“Again, during the seven years ending 1851, 150 males and 147 females were admitted; and of these 58 men and 53 women were discharged cured, making a per centage of 38·7 men and 36·1 women, or a mean of 37·3, a somewhat higher proportion. Epileptics and incurable cases are admitted.

“The mortality, however, appears to have been very high, for between 1841 and 1848, 113 patients died. Now, the average number resident was 77·5,—thus giving a mean annual mortality per cent. resident of 18.* Between the years 1844-51, however, the rate of mortality was less—being only about 14 per cent.

“This asylum is one of four which provide for the insane of South Holland, the population of which in 1850 was 562,354. Of the remaining three one is

* Typhus fever is stated to have removed some.

at the Hague, one at Delft, and the other at Dordrecht. All are small asylums; it is evident, therefore, that the number *out* of asylums must be very large indeed.”*

THE HAGUE.—“This asylum I referred to in a former letter, as one of the four asylums for South Holland. It has been built two years, and is situated completely in the town,—in which circumstance, and its having no resident medical officer, it resembles the asylum at Rotterdam. In other respects, however, it is far superior. Dr. Starek and M. Eckendam are the visiting physician and surgeon. The house contains 84 patients; 27 being men, and 57 women. There are three classes as regards payment: the 1st pay 600 florins (50*l.*) per annum; the 2nd, 400 (32*l.*); and the 3rd, 250 (20*l.*) The two last classes are paupers, and are paid for by the Government. The director only receives a very small stipend; and the salary of the attendants ranges from 8*l.* to 5*l.*; so that everything is in proportion. Provisions are also much cheaper than in England.

“The general appearance of the patients was satisfactory; the dress, of the women especially, very neat; and although no carpets were to be seen, there was both in the day and bed rooms considerable evidence of comfort and cleanliness. In the work-room were a dozen patients, who appeared to be busily engaged, and to be very contented. The bed-rooms, for the most part, contained more beds than is desirable in dormitories, some having 13, others 15. There were fewer, however, in the rooms on the male side of the house. Iron bedsteads are much used. The poor patients appeared generally to lie on straw mattresses; the rich had, in addition, a spring mattress; the latter is certainly a great luxury, but to a stranger its great resiliency reminds him of the voyage he may have just taken across the ocean, and renews some of the qualms he had hoped to have forgotten!

“So much for the quiet patients. For the violent were provided very fair seclusion rooms, which were heated by a warming apparatus. The patient is inspected, not by means of an opening in the door, but from above. The amount of restraint was not large. I regretted, however, to see one patient fastened into a chair by leather straps attached to the legs, arms, and wrists. Padded rooms have found their way into this asylum; the pads composed of horse-hair enclosed in canvas. On the whole, I believe the treatment pursued in this asylum is humane, and that, although there is room for improvement in several respects, there is a sincere desire to pursue the means best calculated to promote the patient’s recovery. It is greatly to be regretted, therefore, that the gardens or airing-courts of the asylum are much confined, and that there is no provision for agricultural employment, and no means of affording entertainments on a large scale in the open air to the patients. It is indeed deplorable that an asylum, for which but recently many thousand pounds have been spent in additional accommodations, should be situated within a town, and be thus doomed always to remain an asylum of inferior rank.

“The Catholics preponderate in this asylum. A chapel for religious worship is being built. In the Hague itself are 26,000 Protestants, 26,000 Catholics, and about 8000 Jews.

“In regard to statistics, I find that during the seven years ending 1851 (a period extending further back than the new building) 195 patients were admitted—viz., 101 men, and 94 women; of these, 40 men and 37 women, or a total of 77, were discharged cured, being a per centage of 39·6 males, 39·4 females, and a mean of 39·5. During the same period, 49 died—17 women, and as many as 32 men. Calculated on the admissions, the total per centage would be 26·1. But reckoned on the mean number resident, the annual mortality per cent. would be as follows:—Men, 19·3; women, 7·5; mean, 14·3. This shows an extraordinary mortality among the men; the per centage of recoveries is fair.”

* See Table, p. 449; the information contained in which was subsequently obtained.

MEERENBERG.—“To-day has been most pleasantly spent at Meerenberg, the name of the asylum for the insane of North Holland. It is beautifully situated near Haarlem, and not far from the sea; and in so flat a country as Holland, the sand hills (dunes) in the neighbourhood strike the eye very agreeably, and are highly prized by the inmates of the asylum.

“Dr. Everts is the physician in chief. He visited the Retreat, and many other English asylums, in 1848, accompanied by Dr. D. H. van Leeuwen; the result of that visit was a determination to adopt in this asylum, which was opened on their return, the principles of non-restraint. Dr. Everts speaks English, and was extremely kind in supplying me with information about the establishment. In Dr. Everts I found a man devoted with all his heart to the comfort and cure of those placed under his charge. Dr. van Leeuwen, a man like minded with, and formerly, as I have said, the colleague of, Dr. Everts, at Meerenberg, has lately left on account of his health, and has been succeeded by Dr. Persyn on the female side, and Dr. Opdorp on the male side of the house, both resident in the establishment. This proportion of medical officers contrasts but too favourably with ours in England. The effective working of thus having one medical officer with supreme authority over two medical men, who have also their respective departments, must depend on their complete co-operation; but, on the whole, I am inclined to think the system works well.

“The asylum is built in the Italian style, and consists essentially of a large quadrangle, composed of a ground-floor and upper story. The square formed by the building is divided into two equal parts, by a one-storied erection uniting the front with the back elevation; the ventilation of this area is, however, by no means deficient, the distance of the wings being too considerable to interfere with the free access of air and light. From the centre of the front elevation rises a three-storied building, devoted to administrative purposes; and on either side are the rooms occupied by patients of the paying class. Attached to these is a separate division for epileptics of the same class; it has no second story, and contains a padded room, a dormitory, and a dining-room. The lateral wings are devoted to the inferior class of patients (in regard to payment), and contain dining-rooms, baths, &c. on the ground-floor, and dormitories above. From these are now being projected (at right angles to the sides) additional wings, one for the pauper men and the other for the pauper women. One only is completed; it has wards for the convalescent and the inoffensive patients; as also nine seclusion-rooms for the violent, one of which is padded.

“The dirty patients and pauper epileptics are placed in the back elevation, the extreme ends of which are carried out in the form of the letter **T**; the central portion is occupied by workshops, the laundry, &c.

“A chapel will be erected at a little distance from the asylum, but a temporary one is situated in the line of buildings already referred to as dividing the quadrangle into two equal parts; here also are placed the school-room, the apothecary's shop, the store-room, and the kitchen.*

“The effect produced on the visitor's mind on approaching the asylum is very agreeable. It gives no impression of a place of confinement. The panes of glass are of larger dimensions than any I have seen; except those in the division for the violent, &c., where they are of an ordinary English pauper asylum size. In the former, the upper sash is moveable, but its descent beyond a certain point is prevented. The size of the panes, however, is such that by breaking the glass a patient so disposed could easily escape. No inconvenience, however, I was informed, has so far resulted from this arrangement. Escapes are stated to be rare, which is the more remarkable, as there is no wall around the estate, and the divisions between the airing courts are of wood. Certainly if, by a careful selection of the cases not likely to abuse the privilege, the frontage of an asylum can be provided with windows similar to those of a

* *Vide* plan at commencement of article.

gentleman's mansion, it is only right to provide such, out of regard to the feelings both of the inmates (accustomed to them) and of their friends, whose first impressions are not to be overlooked. In regard to suicides;—there has been only one since the opening of the asylum, though there are two large ponds near the house, one of which has been almost entirely made by the patients. They serve in the summer for fishing, and in the winter for skating. I understood that once only had a patient attempted self-destruction in these ponds; but she was immediately saved from a watery grave by her attendants. Then, as indirectly affecting the number of escapes and suicides, the proportion of attendants is by no means excessive, though very fair—namely 44 to 391 patients, or 1 to nearly 9. No argument, therefore, can be justly founded on the number of attendants, to show that the slight amount of restraint employed here incurs unreasonable expense. An English attendant would think himself very poorly paid at the Dutch rate of remuneration—none having more than 100 guilden a-year (*St. 6s. 8d.*), and board.

“The number of patients now in the house is, as I have said, 391: of these, 163 are men, and 228 are women. Private asylums are not now allowed in Holland;* and all classes, as to payment, are provided for at Meerenberg; but by far the largest proportion are paupers. There are five classes;—the first paying 1000 guilden per annum (*St. 4l.*); the second, 750; the third, 500; the fourth, 400; and the fifth, 250. This asylum, as well as others in Holland, is visited by the Dutch Commissioners in Lunacy, Professor Kolk, of Utrecht, and M. Feith, of the Hague.

“Next, as to the number in restraint. Dr. Everts is an advocate of the non-restraint system, and is most anxious entirely to abolish all mechanical forms of coercion: at the present time, however, owing to temporary circumstances which I need not detail, restraint is not altogether discontinued. But to how very slight an extent it is employed will be seen, when I state that Dr. Everts showed me a carefully kept daily register of restraint, and that, during the present month, the number ranged from 1 to 3 per diem; and that, last month, not one man was under restraint, and the number of the women averaged 1 to 2. At the time of my making my visit, there were 2 men and 1 woman restrained,—if, indeed, the latter could be called restrained, being only prevented falling out of a chair by a strap: the former were confined by camisoles. This restraint was temporary, and on no pretext whatever is it practised without the order of the superintendent. The seclusion-room (padded, or not, as is required), the strong dress, and similar means, are here employed, as substitutes for restraint, in addition to the constant surveillance, classification, and moral treatment on the part of the officers and attendants.

“As to classification, the wards are divided, first, in reference to payment into the highest, the lowest, and an intermediate class; and these wards are respectively divided according to the mental condition of the patients (as I have mentioned, in speaking of the plan of the building),—as the tranquil, the noisy, the epileptic, and the dirty. The room in which the noisy were placed was extremely gratifying—being quiet (in asylum language), and the patients clean, and as comfortable as their circumstances would admit of. The comfort and cheerfulness of the rooms are very much increased by cages of considerable size fastened to the walls, and filled with singing birds. Mirrors in some rooms, and pictures on the walls, also added very much to their home-ish appearance.

“The bed-rooms were extremely clean—very lofty; and those for the upper class elegantly furnished, and thoroughly home-like. For the pauper class the

* It is the opinion of Dr. Everts, Dr. van Leeuwen, and Professor van der Kolk, that the plan of admitting all classes of patients (as to property) into one establishment, with proper separation of the paupers from the other classes, possesses many moral and economical advantages; that it especially benefits the poor patients, and offers no real inconvenience to the rich. In Holland they consider that the English system of exclusive pauper asylums, is objectionable in many respects.

proportion of dormitories is considerable; several rooms containing eight beds, some twelve, and one I counted with fifteen. In the new wing the average number in one room is less. For the higher class the mattresses are of hair; for the lower, of fine grass, in addition to an under one of straw. The canvas-frame, &c., is employed, as in England, for the dirty class of patients. Of this class there are at present only 9 men and 16 women. The epileptics sleep on the ground floor. They number 21 on the male side, and 25 on the women's. Very minute observations are made of the circumstances attending their fits; the temperature, the state of the barometer, the hour of the day, or night, &c. Dr. Everts finds that the fits of the women are more frequent between 9 P.M. and 9 A.M. than at other times, and most frequent at midnight. On the contrary, with the men, the attacks were of more frequent occurrence in the day.

"Dr. Everts' experience in regard to the general paralysis of the insane—its relative frequency in the two sexes—its early symptoms—its fatality, &c., quite accords with that of Calmeil and the superintendents of English asylums. As to the employment of the patients, I saw abundant evidence of the attention paid by Dr. Everts to this important subject. The work-room on the women's side was truly a delightful sight—containing a large number of clean, neatly-dressed individuals, busily engaged in needlework, the expression of their countenances testifying, in a language common to all nations, of their comfort and happiness. The laundry and drying-room also afford work to the women: others are busied in making the beds, and scouring the rooms and windows—an occupation a Dutchwoman appears thoroughly to enjoy, and while so engaged seems to have adopted for the motto on her escutcheon, "Rest is rust!" You see the servants in the streets, with a pail, and a most effective hand-pump, firing away at the windows, and then, with an enormously long broom, completing the work of purification, refusing all quarter to either the dust or the spiders that may have collected there.

"Then there are workshops for the men—in which joinering, shoemaking, tailoring, &c., are carried on, under the oversight and assistance of properly-qualified persons. Much out-door employment has arisen from the new grounds requiring laying out, &c. About 100 men and 150 women are employed at the present time in various ways. But the mind is not forgotten; and in the school-room many (including idiots) are regularly taught reading, writing, drawing, &c.

"In the evenings, parties of patients are formed in various wards, and in company with the officers and attendants amuse themselves in reading, talking, singing, music, billiards, and innocent games. Thus the day closes at Meerenberg, the patients having felt, some perhaps for the first time, that they are not outcasts from society, but are the objects of kindly feeling and regard.

"As regards medical treatment, I may just state that general bleeding is very rarely employed; when it is, the cases are usually apoplectic, and not maniacal. Topical depletion by leeches and cupping are much more frequently resorted to, Dr. Everts stating that the latter would be employed at least once daily. Tumor's *ventouse monstre* is also considered of great service in deriving the blood from the spinal cord and cerebrum, and in restoring the catamenia in hysterical mania. Emetics are occasionally found of use. There were reported to be on the day of my visit 50 women and 40 men under medical treatment—many of these, of course, quite independent of the mental disease.

"The grounds are, as I have said, very beautiful. We took a walk through some magnificent avenues of elm and beech, through one of which Dr. E. conducted me to his house, which is quite distinct from the asylum. The wife and child of a pauper patient were strolling together in one of these pleasant shady walks, and were very kindly greeted by the excellent superintendent. In such a place, — might (if anywhere) with reason exclaim, 'There is every temptation to lose one's wits!'"

In addition to the information contained in the above Letter, I may here add the following Tables, extracted from the Reports of 1850 and 1851:—

TABLE I.

Showing the number of Patients, dirty, excited, restrained, and secluded.

Period.	Average No. daily dirty.		Average No. daily excited.		No. daily in restraint.		No. daily in restraint chair.		Seclusion by day.		Seclusion by night.	
	M.	W.	M.	W.	M.	W.	M.	W.	M.	W.	M.	W.
1850.												
July . . .	1	7	8	26	1	3	0	1	7	8	13	14
August . . .	1	9	9	24	1	1	0	2	6	6	12	12
September . . .	6	7	12	35	7	6	1	2	8	6	14	12
October . . .	6	8	14	34	7	4	1	2	8	7	14	13
November . . .	7	8	4	35	1	1	1	2	6	7	12	13
December . . .	8	11	15	43	1	1	1	2	8	6	14	12

In the Report of 1851, it is stated that the total cured was greater than in 1850, viz. in 1850, 26, and in 1851, 35; or a per centage of 22·4 on the admissions of 1850, and 27·3 on those of 1851. During 1851 the amount of restraint is reported at 2·4 on every 100 patients in the house; and several reasons are given for being unable, in the then state of the house, to abolish restraint entirely. The number secluded amounted to 5·1 per cent. by day, and 13·1 per cent. by night. The following Table will show many other interesting facts. I regret that I have not any subsequent Report at hand. I am glad, however, to be able to state that since January of this year no restraint whatever has been employed in the asylum:—

TABLE II.

Showing the Admissions, Recoveries, and Deaths during 1851, with other particulars of interest.

						M.	W.	Total.
In the Asylum, January 1st, 1851						111	148	259
Admitted during the year						67	61	128
						178	209	387
Discharged—								
			M.	W.	Total.			
Cured			14	21	35			
Improved			5	2	7			
Not improved			4	2	6			
Died			22	9	31			
Total						45	34	79
Remaining in the Asylum at the end of the year						133	175	308
Average number resident						M.	W.	Total.
Sick, old, and unable to work						127	170	297
Engaged in work						39	68	107
Attending Divine worship						87	102	190
Dirty patients						55	59	114
Violent ditto						8	12	20
Under restraint						15	34	49
Secluded by day						3	4	7
Secluded by night						5	10	15
Attempts at suicide (unsuccessful)						14	25	39
Attempts at escapes (ditto)						1	3	4
Epileptics						8	7	15
Number of fits by day (9 a.m. to 9 p.m.)						25	18	43
Number of fits by night (9 p.m. to 9 a.m.)						1600	2415	4015
						1372	3435	4807

The asylum at Meerenberg has not been sufficiently long established to allow of much certainty in regard to statistics; and the first few years of an institution for the insane are always unfavourable to a large proportion of cures—a much larger number of incurable cases being in the first instance admitted. I have been favoured, however, by Dr. van Leeuwen with the following result. He says:—"In consequence of the moral system of treatment combined with a more regular medical treatment to which the recent cases are submitted—being about 50 out of 300 patients—and in which no mechanical coercion or restraint is practised as a general rule, about 50 per cent. of recent cases of insanity, and 25 per cent. of inveterate cases are restored to health and entire happiness."

The same writer has most kindly sent me a detailed account of an out-of-door entertainment or fête, which took place in the grounds of the asylum sometime ago. Such occurrences are so common in our English asylums that there is no longer much surprise experienced at the good order, &c. of the patients on these occasions. It is not, therefore, as anything novel or extraordinary that I give some report of the event here, but merely as the best proof that I can possibly adduce of the humane management of the establishment, and as a confirmation of the favourable impression I received on visiting it. It will also serve to illustrate Dutch manners and customs. To the good people in Holland the thing was perfectly surprising, and considered almost rash; a fact which must be borne in mind in estimating the great merit of the medical officers in proposing and carrying it out with success.

"The result of a regular vocal and instrumental concert" (writes Dr. van Leeuwen), "given for the first time at Meerenberg, quite surpassed our best expectations. Many days later did the patients continue to remember it gratefully, and several who previously always thought themselves imprisoned at Meerenberg gave up this terrible idea. A detailed account of it given in the papers excited a general interest and sympathy throughout the whole country, as the great bulk of the people in Holland had never yet heard of such a thing in a lunatic asylum, which they had always considered as identical with the mad-houses of the old system. Some benevolent persons assisted us with contributions, and one of the great statesmen and best national poets in Holland, Mr. M. C. van Hall, of Amsterdam, published a poem in memory of this philanthropic entertainment.

"As is usually every year the case in Holland on the 15th of April, the nightingales, the messengers of spring, appeared and delighted in hundreds the beautiful neighbourhood of Meerenberg and the village of Bloemendaal. As Easter Monday, a day on which the working-class in Holland spend the afternoon as much as possible in family parties, walks, and country feasts, was approaching, it seemed but right to prepare on that afternoon a similar recreation for the unhappy patients, who never since their deep affliction had enjoyed their former customs, and some of whom had a lively recollection of the old system of treatment, by which they had been confined to dungeons, and like brutes fastened by chains. To make the patients acquainted with the character and order of the feast, large '*Programmes of the Fête Champêtre, to be held in the afternoon of Easter Monday by the inhabitants of Meerenberg,*' were attached to the walls of the wards a few days before, and to every one who required it a ticket of admission was granted. The patients were filled with joy when they heard that large tents would be erected in the meadow to receive them, with a provision of Easter cakes, 1000 eggs, plenty of pickle, and bread and beer; that Punch and Judy would play; that there would be a shop kept by an old woman, boiling, selling, and distributing fresh hot oil-cakes; and that all kinds of games would be performed, and matches, for which prizes would be given to the winners; and, lastly, that a little band of music would

attend the whole. The very anticipation of all these good things made them forget their sorrows!

At four o'clock in the afternoon of Monday the great bell of the asylum called all the patients up to a large corridor, where they were arranged in the order directed by the programme. Their number amounted to 140, making with the attendants, friends, and visitors, about 250 persons. All being ready they went out, preceded by the band of music, through a broad beautiful avenue, behind the asylum to the field. Here they were received and addressed by their physician and friend, whose speech was listened to with great attention. After the address the male and female patients went to their respective tents, where they were treated with cake, eggs, and beer; then the matches and games began, varied as much as possible, and sometimes interrupted by the distribution of prizes, and by refreshments. I will not enter into a detailed description of the feast itself; it was similar to ordinary popular recreations, such as every one has witnessed once in his life; perhaps there was even more orderly conduct and less extravagance, owing to the behaviour of the attendants and the attention of the officers, who were masters of the ceremony. Certainly the refreshments and Punch and Judy caused the greatest delight.

Only four out of the 140 patients required to be taken in on account of excitement and a desire to escape, and when at half-past six o'clock the bell of the asylum gave the signal that the feast was ending, all the patients followed the officers and attendants without any difficulty, and arranged themselves again in the order required to return home, where a supper of chocolate and cakes awaited them. After supper, the evening was spent in the same satisfactory manner by in-door entertainments, and the following night was as quiet as ever could have been wished."

The poem mentioned in the above account, as written by M. C. van Hall, ended with the words,—

"Come spring, come nightingales,
Come to Bloemendaal's sweet neighbourhood!"

In answer to this poetical effusion, Dr. van Leeuwen responded also in rhyme, and I have to thank a friend for having so successfully turned it into the following English verse:—

"Lured by your kindred notes, O greyhair'd bard of the city,
Joyous the nightingales throng to Bloemendaal's woods and gay parterres,
Filling its gardens around with many melodious echoes:
Mingling their song with your muse, loud thrills the rapturous concert,
Till Nature's chorus usurps the glory of Art's diapason;
Bringing a soothing charm to minds bowed down in distress;
 wooing awhile into peace the fiercest frenzies of madness!
That morn a hundred of those who have known that worst of afflictions,
Bent the knee unto Heaven with the prayer of a Christian household:
Now they wander afield to taste the fresh breath of the spring time
Thankful to Him who bestows such blessed season of respite.
Even to these whose life is so painfully darken'd with sorrow
Rises supreme over all that Faith whose power worketh wonders:
Joyful in freedom they roam, forgetting their bondage, while under
An eye that kindles with love, and brings to each heart consolation.
'Are these then those turbulent souls, whom rage and demoniac fury
'Urge with an impulse dire, as tho' sprung from the madness of Satan?'
Ah! no, let us soften with love the harshness of words breathing terror;
Restored to humanity's ranks, let us hail them once more as our fellows!
Behold their light-hearted joy! look around on their innocent gambols,
Threading the mazy dance—before the tents on the green sward;
Moved with joy is each-heart by the genial impulse of spring time;

Lighted each face with a smile—as if to the season responsive!
 Such the glad motions of spring—called forth by the nightingale's carol,
 Kindling the spirit of love, and cheering the heart with its music.
 Worthily have you sung, that by fostering care and attention
 Glimmering sparks of the mind may be fann'd to a nobler existence.
 Long then may Meerenberg thrive—long, long, may our Fatherland
 witness,
 How dear to the Hollander's heart are the tenderest ties of affection!"

AMSTERDAM.—Since the erection of the Meerenberg Asylum, the establishment formerly here and at Haarlem have been closed, and their insane removed to Meerenberg. The following is a statement showing the admissions, discharges, and deaths of the patients at these asylums from 1844 to 1849:—Admitted, 243 men; 288 women; total, 531. Cured, 189, or 35·5 per cent. of the admissions. Died, 150, being a mortality per cent. per annum on the mean number resident of 14·5.

There is a small asylum at Amsterdam for the Jews. It merits no particular description. I subjoin, however, a statement of the admissions, discharges, and deaths from 1844 to 1850 (inclusive). It exhibits a very low per centage of recoveries and a high rate of mortality. But it would not be fair to draw too decided an inference in so very small an asylum, from statistics extending over not more than seven years.

TABLE,
*Showing the Admissions, Recoveries, and Deaths at the Jews' Asylum,
 Amsterdam, from 1844 to 1851:—*

				M.	W.	Total.
Admitted during the seven years				46	52	98
Remaining in the Asylum, January, 1844,				3	4	7
				49	56	105
	M.	W.	Total.			
Discharged recovered	10	12	22			
Discharged not recovered	2	8	10			
Died	23	15	38			
Of those in the Asylum, January, 1844—						
Recovered	—	—	—			
Not recovered	1	—	1			
Died	1	1	2			
Total	37	36	73			
Total discharged and died in seven years				37	36	73
Remaining in the Asylum, January, 1851				12	20	32
Average number resident during seven years				7·6	11·8	19·4
				M.	W.	Mean.
Proportion of the recoveries per cent. of the admissions				21·8	22·4	21·4
Mean annual mortality per cent. resident				42·0	17·0	29·2

UTRECHT.—“This asylum is situated in the town, and is, consequently, subjected to many disadvantages; the building is old also, and its plan has nothing particular to recommend it—a portion of it is about to be pulled down and rebuilt. Notwithstanding these disadvantages, however, there is at this asylum

that which compensates (to a great extent) for architectural and local defects, a thorough desire to promote the comfort and cure of its inmates. I have seen Professor Schroeder van der Kolk, the visiting physician to the asylum; he is a man of great ability, and profoundly conversant with the subject of insanity; his ability is only equalled by his humanity, and to him, I believe, Holland owes more than to any other one man for the reformation which has been effected in the treatment of the insane. He introduced me to Dr. van Lith, the superintendent of the Utrecht Asylum, who kindly conducted me over it, and supplied me with the information I have obtained.

"The asylum provides for the insane, poor and rich, of the province of Utrecht—the population of which province is 149,347; the number of patients is 127, of whom 67 are men and 60 women. Hence it will be evident that a considerable number of insane must be unprovided for by this asylum, which is the only one for the province.

"About two-thirds of the patients are Protestants, and one-third Catholic. There are three classes as to payment, 25 being of the first or rich division (paying 66*l.* 12*s.* per annum), 27 being of the middle division, and paying half the above, and 75 being of the last or pauper class, and paying 15*l.* to 13*l.* 6*s.* There is no true classification of the patients in regard to their mental state. There are no separate rooms for the dirty and noisy; nor is there a chapel or schoolroom. The proportion of attendants is good, 17 to 127, or 1 to 7 and a fraction. One or two of them, however, are engaged in other work. Their wages appear to be, as at the other asylums I have visited, extremely low, the highest being 12*l.* a year.

"The pauper females were at dinner when I entered their room. I was informed that none were that day absent from table on account of noisy, violent conduct; they certainly looked extremely comfortable and clean, and were eating their dinner with great gusto.

"The day-rooms were comfortable—the airing-courts adjoining were small and filled with trees—they looked rather dark and gloomy, however. Owing to the situation of the asylum in the town, no room enjoys a free and extensive prospect. The bed-rooms were clean; the dormitories contained a large number: in one room I counted as many as 30 beds. The epileptics sleep in recesses in the walls, guarded by folding doors of open wood-work; this has an unpleasant effect, and is too much like a berth in a cabin.

"There was a room which gave satisfactory evidence of the occupation of the patients—a bazaar-room, in which I saw some fancy models of ships, houses, &c. very nicely executed. Indeed, in one way or another very few patients, not of the rich class, are unemployed. Some were busy tailoring, but few were at work during my visit, owing to its being a holiday.

"Neither Professor van der Kolk nor Dr. van der Lith subscribe unconditionally to the Non-Restraint System, but the amount of mechanical restraint practised is very small. On the day in which I visited the asylum I saw two patients restrained. Sometimes, a week passes without resorting to coercion, but on an average, Dr. van der Lith informed me, that probably one patient might be daily restrained. I was thoroughly satisfied, however, that a kind and humane spirit actuates the direction of this institution; and I can only hope that before very long an asylum may be provided *out* of the town of Utrecht, in which the same principles may be carried out towards the patients, but (owing to an improved site and building) with still greater success."

I may here introduce a short reference to the past history of this asylum extracted from the Appendix to Professor van der Kolk's "Oration," published 1837. To this I am able to add the statistics of the asylum from 1844 to 1851.

"Before 1831," says the Professor, "the insane of the lowest class alone

were received into this asylum. These, shut up in narrow and stinking cells, were left in other respects to themselves, the sexes being entirely mixed. The numbers varied, but there were on an average between 20 and 30. From 1831 to the present time, the building has been more and more improved, so that even gardens have been added, a sufficient area for the free current of air afforded, adapted also for games and sundry occupations; and workshops have been built, in which various trades are performed by the patients. It was also provided that there should be open places in which those who were excited, noisy, and violent might be located; thus separated from others, they were able to enjoy the open air without danger to any one. * * * * *

"These and other improvements having been effected, the number of patients of every rank and place, annually sent to this asylum, was much increased; these were divided into three classes,—the rich, those of moderate means, and the poor. To each of these classes separate parts of the building were assigned, and gardens in which they were able to work, exercise themselves, or play, care being taken that there was a complete separation of the sexes. Those of the first class enjoy a single bedroom, ornamented in a manner similar to what they have been accustomed to at home. * * * * *

"In regard to the early condition of this asylum, it is to be remembered that the number of the insane which were annually admitted and cured was so small, that no comparison can be made between them, such as we have given in the following Table. For often one patient was admitted, and one was discharged cured, which led to an entirely false conclusion. From this cause, out of the number of patients who yearly entered our asylum, from the 1st day of January, for 30 years,—that is from 1800 to 1830,—we have taken the mean number, which is equal to 24; the number discharged cured during this period was 36, therefore 1·2 per annum. Consequently, the proportion is as 24 to 1·2. But for the last five years the mean number of patients was 55·4, and the number of the cured 17·6; consequently, the proportion is as 55·4 to 17·6. Hence it follows that the number of cures during the first 30 years of the century is to the number of cures during the last 5 years as 1·2 to 7·6, or as 3 to 19. * * * * * The contrast in the mortality during these is also equally striking. During the first 30 years of the century, the mortality calculated on the admissions was 35 per cent. During the last 5 years only 17 per cent."

The Professor adds the following Table of admissions and recoveries at the Utrecht asylum during five years:—

Year.	Admissions.			Recoveries.			Per centage of Recoveries.
	M.	W.	Total.	M.	W.	Total.	
1832-33	17	5	22	9	1	10	45
1833-34	32	12	44	14	0	14	31
1834-35	26	15	41	16	2	18	44
1835-36	32	21	53	15	5	20	38
1836-37	35	22	57	20	6	26	46
1832-37	142	75	217	74	14	88	40

It is singular that in the following Table, which embraces a subsequent period—namely, 1844 to 1851—the proportion of cures to the admissions is considerably less than it was in an earlier period of the institution:—

TABLE,
*Showing the Admissions, Recoveries, and Deaths at the Utrecht Asylum,
 from 1844 to 1851.*

				M.	W.	Total.
Admitted during the seven years				173	119	292
Remaining in the Asylum				64	52	116
				237	171	408
Discharged—				M.	W.	T.
Recovered				50	38	88
Not recovered				35	20	55
Died				45	26	71
Of those in the Asylum, January, 1844—						
Recovered				13	10	23
Not recovered				8	9	17
Died				19	11	30
Total				170	114	284
Total discharged and died in seven years				170	114	284
Remaining in the house, January, 1851				67	57	124
Average number resident during the seven years				66	54·4	120·4
				M.	W.	Mean.
Proportion of the recoveries per cent. of the admissions				28·9	32	30·1
Mean annual mortality per cent. resident				13·7	9·5	11·6

ZUTPHEN.—“This place recalls the name of the brave Sir Philip Sidney, for it was here that, after the close of the battle which cost him his life, Sir Philip Sidney, as generous as he was brave, refused the water offered him, and pointing to a common soldier near him, exclaimed, ‘This man’s necessity is greater than mine.’ But I came here to visit a lunatic asylum, and not a battle field; and so will proceed at once to describe it.

“Accompanied by Dr. Ramaer, its physician, I went to the asylum, which is situated in the town of Zutphen itself, and is an old, irregularly built building, having nothing architecturally to recommend it. It provides for the insane of Gelderland, a province containing about 370,560 inhabitants. It contains 225 patients—about an equal number of men and women. The patients are arranged in three classes on the basis of payment—the scale is the same as at Utrecht. About one-third of the patients are Protestants, the remaining two-thirds Catholics and Jews.

“Great energy characterises Dr. Ramaer, and I believe he endeavours to provide for the comfort of the patients committed to his charge. Many of the patients were employed; I was pleased with the appearance of the tailor’s room, in which many of the patients were actively at work, and engaged in lively conversation: there was a joiner’s room also—and on the women’s side of the house the patients were occupied with sewing, washing, &c. There is not, and hardly can be, out of door employment: it is grievous to think of the number of lunatic asylums which, simply by their locality, are unable to supply this important auxiliary to the endeavours of the superintendent to benefit the physical and the mental health of his patient. To some extent, no doubt, even in intra-mural asylums, this defect can be met by possessing land in the neighbourhood, and sending those who are suitable to work there. But to this plan there are many obvious objections, only less than having no land at all. The asylum has no school and no chapel; it was stated that the patients are taken to the chapels in the town.

"The baths are good; a douche is provided, but the bore is small. It is never used as a punishment by which to bully the patient into a confession of his delusions, but simply as a therapeutic agent. The ventilation is effected by windows, and is not so complete as is desirable. The day-rooms are heated by stoves, the bed-rooms are without; there is no apparatus for warming the house generally. To our English minds stoves never convey the same idea of comfort and cheerfulness as open fires. The airing courts are too crowded with trees in the Dutch asylums, and give one rather a gloomy impression in consequence; but if this is carried to excess in Holland, we in England perhaps go to the other extreme, and keep our airing courts too bare.

"With regard to restraint; at the time of my going round the house I saw only one man restrained; but there were two women; one, of the highest class, was confined by wrist straps; the other, a pauper, was securely fastened into a coercion chair, and wore besides a camisole. She was considerably excited, and was spitting in all directions. I should have very much preferred being in seclusion with my limbs free, had I been her, and as superintendent should have much preferred seeing her there. Dr. R. distinctly stated that restraint in her case had only been necessary for a few days, and would probably not be required much longer. The court for the noisy women contained about 30 patients,—many of them were boisterous, and would probably have been restrained in an inferior asylum; the dress was neat, and free from anything of a prison character, as some of our English strong dresses really are. Dr. R. has no padded room. There was a dormitory for the dirty patients, as well as those of cleanly habits, and owing to the number of beds, and the ventilation not being very good, I cannot doubt the rooms are often offensive. The number of patients in the other dormitories was far too large (as many as 30), and much crowded. One room which I entered, where there were several women patients ill in bed, was so offensive, that I could not have remained in it long without being sick.

"To these particulars I subjoin the following statistical information:—

TABLE,
*Showing the Admissions, Recoveries, and Deaths at the Zutphen Asylum,
from 1844 to 1851.*

	M.	W.	Total.
Admitted during the seven years	228	211	439
Remaining in the Asylum	44	29	73
	272	240	512
	M.	W.	Total.
Discharged recovered	65	80	145
Discharged not recovered	17	10	27
Died	70	50	120
Of those in the Asylum, January, 1844—			
Recovered	3	3	6
Not recovered	2	4	6
Died	15	9	24
Total	172	156	328
Total discharged and died in seven years			
	172	156	328
Remaining in the house, January, 1851	100	84	184
Mean number resident during seven years	81·4	72·	153·4
	M.	W.	Mean.
Proportion of the recoveries per cent. of the admissions	37·9	28·5	33·03
Mean annual mortality per cent. resident	14·8	6·9	10·8

“ Dr. R. constantly finds a much larger proportion of noisy patients among the women than the men—at present there are nearly twice as many of the former more or less excited. On mentioning this to ———, as a reproach on the gentler sex, she argued that it was natural to suppose women would be more noisy than men when insane, because they are so much less so when they are sane !

“ At Zutphen I met with the superintendent of the Deventer Asylum, formerly under the charge of Dr. Everts. I had intended to have visited it, but several circumstances, and the necessity for hastening on to Siegburg, induced me to omit Deventer, as also the colonies of criminals at Ryssel, which I had much desired to visit. I subjoin, however, the following statistical information in regard to the Deventer Asylum from 1844 to 1851. It exhibits the highest per centage of cures of any asylum in Holland:—

TABLE,

Showing the Admissions, Recoveries, and Deaths at the Deventer Asylum, from 1844 to 1851.

	M.	W.	Total.
Admitted during the seven years	146	103	249
Remaining in the Asylum, January, 1844	69	47	116
	215	150	365
	M.	W.	Total.
Discharged recovered	55	46	101
Discharged not recovered	17	13	30
Died	29	16	45
Of those in the Asylum, January, 1844—			
Recovered	8	7	15
Not recovered	6	8	14
Died	24	14	38
Total	139	104	243
Total discharged and died in seven years	139	104	243
Remaining in the house, January, 1851	76	46	122
Average number resident during the seven years	79·4	46·4	126
	M.	W.	Mean.
Proportion of the recoveries per cent. of the admissions	37·7	44·6	40·6
Mean annual mortality per cent. resident	9·4	9·2	9·3

“ I have now seen the principal Dutch asylums, and shall leave Holland to-morrow. In reviewing their condition generally, it will be evident that they are not yet perfect; a great work of reform, however, has been commenced, and considering the period of time which has elapsed, I think that the progress made in the amelioration of the condition of the insane is highly satisfactory. One noble institution has been reared, of which any country might justly be proud, an institution which, itself the indication and result of the reform in Holland, will in its turn act as the nucleus of an extended improvement in the management of the Dutch asylums. It will prove—it has proved already—the truth of those principles in the treatment of the insane which are now so universally admitted in our own country, but which to many in Holland, a few

years back, were comparatively little known. And if I am not greatly mistaken, late as Holland has been in reforming the state of her asylums, she will ere long advance to a point beyond that arrived at by some Continental countries which began the work of reformation before her. She has ever been in advance of many other countries in her philanthropic institutions, and it was only because she failed to appreciate the character of the lunatic that she neglected him; his true character recognised, she will with a firm purpose and unrelaxed energy pursue the work which she has so nobly begun."

The chief defects which still remain may be briefly summed up as follows:—1st. The non-residence in many asylums of any medical officer or well-educated non-medical superintendent. 2nd. The situation of most of the asylums—in the heart of the town—and the consequent want of out-of-door employment. 3rd. The substitutes for mechanical restraint are not sufficiently introduced; and the provision for dirty and violent patients incomplete. 4th. The classification of the patients in regard to mental condition is far from perfect. 5th. Either the number of the Commissioners should be increased, or they should be able to devote their time exclusively to the subject.

The present Commissioners, however, have worked laboriously at their office, and have obtained much valuable statistical information, from which I have prepared the following Tables. They afford important results relative to the admissions, discharges, &c., of the patients. I may here briefly remark upon the most salient of these. In taking any single institution, and comparing its statistics with another, we are exposed to many fallacies arising from the possibility of different circumstances in each. But this source of error is less likely to occur when we take the whole or a large number of the asylums of a country, and examine the grand results, not only as facts of independent interest, but as compared with the results of a large number of asylums in other countries. We are able also, in the present Tables, to distinguish the cures of the patients admitted after a given period from the cures of those previously in the establishment. Hence the per centage of cures on the admissions is exact. An interesting fact in the present case is apparent, from being able to make this distinction. Of the 837 in the asylums in 1844, only 11·9 per cent. were cured up to 1851; while of the admissions which took place between 1844-51, 32·4 per cent. were cured. We are aware that we are here comparing two different things—the per centage on the admissions and the per centage on the number in the house in a certain year; but the allowance to be made for this is comparatively small, and still leaves a large actual difference. This is principally to be explained, I imagine, by the large number of incurable cases which must have been in the asylums at that time (1844); and shows that they have become, as it was intended they should, *medical* asylums, instead of mere places of confinement.

With regard to the recoveries of patients since 1844, it will be seen from Table I., that of the total number of patients (3087) admitted into the Dutch asylums, 1000 were discharged "recovered;" giving a per centage of 32·4. It is interesting to compare this result, as Table II.* will enable the reader to do, with the recoveries, calculated on the same principle, of the insane in various asylums in England and other countries. It may be well to premise, that the comparison can only justly be made between the asylums in Holland and those asylums which receive epileptic and incurable cases; and also, that the Holland asylums receive all classes as regards pecuniary con-

* The figures in this Table, introduced in order to make a comparison, are taken from Dr. Thurnam's "Statistics of Insanity."

ditions. Thus, in 1850, 153 were of the superior, 36 of the middle, and 1074 of the lowest class: hence, about five-sixths were of the pauper class. Now, comparing the above per centage of recoveries with an average of 6 asylums in England receiving both private and pauper patients (about one-third of the former), we observe that a considerably larger proportion recovered in the 6 English asylums. On the other hand, in the metropolitan licensed houses, during 4 years (containing more than one-half paupers), the proportion of recoveries was as low as 25·65 per cent., being 6·75 below the per centage in Holland. Again, what is remarkable, at Siegburg, where only curable cases are admitted, only 30·73 per cent. recovered. Considering the condition from which the asylums in Holland have so recently emerged, I think the proportion of recoveries as high as could be expected; it is probable that for the succeeding decennial period, it will be raised nearly 10 per cent. Dr. Thurnam, in his "Statistics," states that he considers, under ordinary circumstances, a proportion much below 40 per cent. to be low, and one much exceeding 45 per cent. to be high.

In regard to the mortality, this I have calculated on the mean number annually resident in the Dutch asylums. It is certainly high. The average of six English asylums receiving private and pauper patients, exhibits a mean annual mortality of 10·46; the mortality, however, of nine asylums in England, receiving paupers only, was 13·88; and that of the metropolitan licensed houses (1839-43), 14·68.

TABLE I.

Showing the Admissions, Discharges, and Deaths of Patients in the Dutch Asylums, during seven years (1844-51).

				M.	F.	Total.
Remaining in the Asylums, January 1st, 1844				424	413	837
Admitted during seven years (1844-51)				1500	1497	3087
				2014	1910	3924
Discharged—				M.	F.	Total.
(a) Of those in the Asylums, January, 1844.						
Recovered	56	44	100			
Not recovered	38	42	80			
Died	159	165	324			
(b) Of those subsequently admitted.						
Recovered	477	523	1000			
Not recovered	191	152	343			
Died	474	327	801			
Total	1395	1253	2648			
Total discharged and died during seven years				1395	1253	2648
Remaining January 1st, 1851				619	657	1276
Average number resident during the seven years				608	502	1110
				M.	F.	Mean.
Proportion of the recoveries per cent. of the admissions				30·	34·9	32·4
Mean annual mortality per cent. resident				15·1	13·9	14·5

TABLE II.

Exhibiting the Comparative Statistics of various Asylums in Great Britain, Holland, France, Germany, and America.

Name and Description of Asylums.	Remaining under Care, Jan. 1st, 1844.	Numbers Admitted.	Numbers Recovered.	Numbers Died.	Proportion of Recoveries per cent. of Admissions.	Mean Annual Mortality per cent. Resident.
Average of eleven Dutch Asylums, for pauper and private patients	837	3087	1000	1125	32.40	14.5
Average of nine English County Asylums, receiving paupers only	3273	15548	5746	4551	36.95	13.88
Average of six English County Asylums, receiving private and pauper patients	1127	7738	3627	1256	46.87	10.46
Average of Metropolitan Licensed Houses, 1839-43 (more than half paupers)	1827	5850	1501	1209	25.65	14.68
The York Asylum (one-third paupers), 1814-44	157	1375	475	297	34.54	7.24
The York Retreat, 1796-1847	84	593	292	141	49.24	4.74
Average of seven Scotch chartered Asylums (more than half paupers)	1324	7130	3021	931	42.37	7.52
Average of ten (pauper) Irish Asylums	2147	10255	4957	1891	48.33	8.7
Average of five American Asylums (private and pauper patients)	640	8675	4062	688	46.82	9.56
Charenton, 1826-33 (private patients)	...	1557	518	546	33.26	14.96
Siegburg, 1825-40 (only curable patients)	...	1129	347	161	30.73	7.4

TABLE III.

Showing the Ages of Patients in each Decennial Period admitted into the Dutch Asylums in 1850; also the Form of the Disorder.

Decennial Period.	MEN.							WOMEN.							Total of Men and Women.
	Mania.	Monomania.	Melancholia.	Dementia.	Idiotcy.	Epilepsy.	Total.	Mania.	Monomania.	Melancholia.	Dementia.	Idiotcy.	Epilepsy.	Total.	
Under 10 . . . . .	...	...	...	...	...	2	2	...	...	...	1	...	...	1	3
From 10 to 20 . . .	4	2	...	...	2	4	14	4	1	...	...	1	...	6	20
" 20 to 30	19	9	5	11	1	10	55	20	3	12	6	4	5	50	105
" 30 to 40	19	12	8	12	4	2	57	23	5	10	3	...	1	47	104
" 40 to 50	20	14	12	11	...	1	58	18	10	13	12	2	...	55	113
" 50 to 60	8	4	6	5	...	...	23	19	4	12	9	...	...	44	67
" 60 to 70	2	2	5	2	...	...	11	7	5	4	4	...	...	20	31
Above 70	1	...	...	...	...	...	1	1	...	1	12	...	...	14	15
Total	73	43	36	43	7	19	221	92	28	52	52	7	6	237	458

TABLE IV.

Showing of the 378 discharged in 1850, the Ages in Decennial Periods, and the Form of the Disorder.

Ages of the Patients Discharged and Died.	MEN.						WOMEN.						Total Discharged and Died.
	Dead.	Not Insane.	Not Improved.	Improved.	Cured.	Total.	Dead.	Not Insane.	Not Improved.	Improved.	Cured.	Total.	
Under 10 . . . . .	...	...	...	...	1	1	...	...	...	...	...	1	2
10 to 20	6	1	1	...	1	9	3	1	1	...	...	2	16
20 to 30	8	1	6	6	20	41	10	...	5	1	22	33	79
30 to 40	19	2	3	3	24	51	17	...	...	2	24	43	94
40 to 50	15	1	2	8	19	45	6	...	4	4	18	32	77
50 to 60	17	...	2	...	15	34	11	2	1	...	16	30	64
60 to 70	12	...	...	1	6	19	10	1	1	...	5	17	36
Above 70	2	...	...	...	...	2	7	...	...	1	...	8	10
Total	79	5	14	18	86	202	64	4	12	8	88	176	378

TABLE V.

Showing the Period of Residence in the Asylums of those who recovered and died in 1850.

Period of Residence in the Asylum.	RECOVERED.							DIED.						
	Mania.	Monomania.	Melancholia.	Dementia.	Idiotcy.	Epilepsy.	Total.	Mania.	Monomania.	Melancholia.	Dementia.	Idiotcy.	Epilepsy.	Total.
MEN.														
Less than 3 months . .	16	2	4	1	...	...	23	8	1	1	8	...	1	18
From 3 to 6 "	7	5	4	...	...	...	17	2	1	3	1	...	...	9
" 6 to 12 "	18	5	2	3	...	...	28	3	...	2	5	2	...	14
" 1 to 2 years	3	1	5	1	...	1	11	3	3	...	3	1	1	11
" 2 to 3 "	1	...	...	...	...	...	1	2	1	...	6	...	...	9
" 3 to 4 "	1	...	...	...	...	...	1	1	1	...	2	...	...	4
" 4 to 6 " . . . . .	...	1	...	1	...	1	3	1	...	...	2	...	...	3
" 6 to 8 " . . . . .	...	1	...	...	...	...	1	...	...	...	...	...	2	2
" 8 to 10 " . . . . .	...	...	...	...	...	...	...	...	...	...	1	...	...	2
Longer than 10 years . .	...	1	...	...	...	...	1	2	1	...	4	...	...	7
Total	46	16	15	6	...	3	86	22	7	6	32	4	8	79
WOMEN.														
Less than 3 months . .	15	2	3	1	...	...	21	4	1	6	6	1	1	19
From 3 to 6 "	12	3	6	2	...	...	23	1	2	1	2	1	...	7
" 6 to 12 "	15	2	8	2	...	...	27	1	...	...	...	1	...	2
" 1 to 2 years	4	2	4	...	...	...	10	3	4	2	4	1	...	14
" 2 to 3 "	2	1	...	...	...	...	3	1	...	...	...	...	1	4
" 3 to 4 "	1	...	...	...	...	...	1	1	1	...	3	...	...	5
" 4 to 6 " . . . . .	...	...	1	...	...	...	1	...	1	...	2	1	...	4
" 6 to 8 "	2	...	...	...	...	...	2	...	1	...	...	...	...	1
" 8 to 10 " . . . . .	...	...	...	...	...	...	...	...	1	...	2	...	...	3
Longer than 10 years . .	...	...	...	...	...	...	...	...	1	1	1	1	1	5
Total	51	10	22	5	...	...	88	11	11	11	22	6	3	64

MEDICAL JURISPRUDENCE OF INSANITY.

THE common law (which is ours, except so far as we have modified it by the statutes) has adopted two widely different rules on the subject of insanity; one having relation to civil affairs, and the other referring entirely to criminal cases. By the first, a man whose mind is deranged, his intellects having become insufficient to conduct the common business of life, his property will be taken from him, and trustees appointed to take care and manage his estate. By the second, strange as it may seem, the same man, who has been adjudged incapable of conducting his own concerns on account of insanity, may be held responsible for criminal acts, provided he possesses a mind capable of distinguishing right from wrong. In legal effect there are, therefore, two kinds of unsoundness of mind—an unsoundness which is partial, and destroys one's capacity for civil affairs, and an unsoundness which is total, and utterly destroys the moral responsibility, so that the deranged is no longer a reasonable and accountable being. In contemplation of law, partial insanity simply reduces a man to the condition of a child, a minor under age, who cannot be compelled to fulfil his contracts, but who is still answerable for crimes committed. His position is similar to that of the habitual drunkard—he is deprived of the management of his property, because manifestly disqualified by his habits to take care of it judiciously; and similar, also, to that of the man whose mind falls into decay by reason of advanced age, and the apparent failure of the mental power.

According to the early writers, to excuse a man from the consequences of his act, he must have been, at the period when he committed the offence, wholly incapable of distinguishing between good and evil, or comprehending the nature of what he was doing. If he be but partially insane, the law does not excuse him, but holds him to a rigid accountability: making it necessary for him to show that, at the time the deed was committed, he was absolutely incapable of distinguishing between right and wrong. As Lord Hale, one of the sages of the law, expresses it, if he possess as great understanding as ordinarily a child of fourteen years hath, he may be guilty of treason or felony. It is well known to most of our readers, that the principles of what is termed the common law are ascertained from the decisions of the courts: our own first, and those of England secondly, by way of illustration. The reason of this is found in the fact that we hold our laws, like our literature and language, in common with that country, having derived them thence with our very being. For as the statesmen of the revolution contended, the men who first emigrated to this country brought with them the rights of freemen, and the laws and privileges of their own country. Instead of coming forth a loose, disjointed and confused congregation of reckless men, like the Spanish into Mexico and Peru, impatient of control, and thirsting for gold, they came forth freely and soberly, a well-appointed community. In place of an arbitrary government of undefined civil and military powers, they brought with them charters of liberty, civil officers, an organized government, and a society firmly knit together, wearing as a garment the common law of England. When, therefore, we quote the decisions of the English courts, they are not referred to as binding precedents, and authority to which we must yield obedience, but rather as the historical evidence of what the law was, or still continues to be. They are, as Coke termed, the witnesses of the law, to whose testimony on the subject of insanity we will now briefly refer.

In the case of Edward Arnold, indicted and tried at the Surrey Assizes, in England, for shooting at Lord Onslow, in 1724, the court, in charging the jury, used these words:—"It is not every kind of frantic humour, or something unaccountable in a man's actions, that points him out to be such a madman as is to be exempted from punishment; it must be a man that is totally deprived of his

understanding and memory, and doth not know what he is doing, no more than an infant, than a brute, or a wild beast: such an one is never the object of punishment." Upon this charge it is scarcely necessary to say the jury found the prisoner guilty, and he received the sentence of death, though there was no question of his partial insanity. It is worthy of remark, that at the period of this trial, the accused, in such cases, were not allowed to come into court with counsel, except upon the special grace and favour of the court. In the case of Earl Ferrers, tried and convicted of the murder of John Johnson, in 1760, the same rule was enforced. On this occasion the highest solemnities of the law were observed. George II. issued a special commission to his Chancellor, Henly, reciting that the King considering justice an excellent virtue, and pleasing to the Most High, and concluded with making him Lord High Steward, with authority to preside in the august court thus organized. Upon the trial, the Solicitor-General, quoting the law as laid down by Hale (whom he terms the wise judge and great lawyer), says, that the result of his whole reasoning stands thus:—"If there be a total, permanent want of reason, it will acquit the prisoner. If there be a total temporary want of it when the offence was committed, it will acquit the prisoner; but if there be only a partial degree of insanity, mixed with a partial degree of reason; not a full and complete use of reason, but a competent use of it, sufficient to have restrained those passions which produced the crime; if there be thought and design; a faculty to distinguish the nature of actions, to discern the difference between moral good and evil; then, upon the fact of the offence proved, the judgment of the law must take place."

The case of James Hadfield, quite as interesting as the one first-mentioned, was tried in 1800. The indictment was for shooting at the king, &c., in a crowded theatre, just as he entered the box, and the audience was rising to cheer him. The rule as to responsibility for crime, was substantially the same as quoted above: though Mr. Erskine commented upon the rule insisted on by the Attorney-General, that to protect a man from criminal responsibility, there must be a total deprivation of memory and understanding. He admits it the very language of Coke and Hale, but contends it cannot be applied in a literal sense, for in that case such a thing as insanity seldom if ever occurred.

It appeared on the trial that the prisoner had been a soldier, and wounded in battle by a blow upon the head, breaking the skull and injuring the brain; that immediately after the wound was received, he became crazy, and continued so occasionally up to the time of his attempt to kill the king: his insanity being intermittent. Prior to his receiving the wound, the witnesses proved him brave and loyal, and the jury acquitted him on the ground of insanity.

It has been sometimes said that the law does not understand, or knows no distinction between different kinds of insanity. This is not strictly true, as is proved by the case of John Bellingham, tried for the murder of the Right Honourable Spencer Perceval, before Chief Justice Mansfield, in 1812. The rule, as laid down in that case, exempts the prisoner from responsibility, provided he is found deprived of all power of reasoning, so as not to be able to distinguish whether it was right or wrong to commit the most wicked transaction. But this, he adds, must be proved; and the jury must find it as a fact, beyond all doubt, that at the time he committed the act with which he stood charged, he did not consider murder was a crime against the laws of God and nature. There was no other proof of insanity which would excuse murder or any other crime.

After speaking of other kinds of insanity, the judge then goes on to say:—"There was a third species of insanity, in which the patient fancied the existence of injury, and sought an opportunity of gratifying revenge by some hostile act. If such a person were capable, in other respects, of distinguishing right from wrong, there was no excuse for any act of atrocity, which he might commit under this description of derangement."

On the trial of Hadfield, mentioned above, it was contended by Mr. Erskine, on behalf of the prisoner, and may be assumed as admitted by the court, that where the prisoner laboured under a delusion connected directly with the subject-matter of the transaction for which he stands indicted, he cannot be convicted of crime, even though he be not deprived of all power of reasoning. This distinction, however, when examined, fades away into the original colour, and leaves to the jury still the same simple inquiry, whether the party charged with the offence *knew* that the very act he committed was criminal.

Having referred to a few of the leading cases on the subject of insanity, enough to show what the law now is, and how far it enforces human responsibility, we arrive at the point where we have a right, and are bound to speak for ourselves. With a proper estimate of history, we cannot be indifferent to the past, and those various influences out of which have arisen our present social relations. We go back to the sources of civilization with pleasure, and trace with delight the increasing and expanding volume as it emerges from the wild and mountainous regions of romance, and opens on the unobstructed plains of history. We listen to its many voices, and make ourselves acquainted with its wisdom. We go out of ourselves and the present time, to learn thoughts of those who have preceded us. We gather instruction from their deeds, and a wise forecast from their folly. It is thus we trace the progress of opinion, and the slow, though constant and firm, advance in the tone and temper of law—that high and sublime march of the people, in which there are few hasty changes, and no magnificent studies, but a modest and steady progression, keeping time with the music of intelligent thought. It is not a romance, nor an epic poem; it is no picture of the imagination, nor republic of Utopia; but a system of principles that sprung up out of the national mind, and adapted themselves to every condition and circumstance of life. Flexible in their nature, and always closely surrounding us, we are generally unmindful of their presence till the very moment we need protection, so easily and naturally do we wear them as an armour of defence.

Like our political institutions, they come down to us from the past, associated with the events and scenes of history: imperfect in particulars, but in the main breathing the earnest and manly spirit of times when men stood upon their rights, maintained the claims of the citizen against the sovereign, and established the law upon the rough and rugged field of battle. They come to us dressed in the style of an early day, but with a universal and catholic authority, comprehending the past, present, and future. They command respect and elicit our regard in infancy and childhood, long before we are able to understand them or appreciate their excellence. It is thus the common law becomes a part of the common mind, intimately blending itself with the thoughts, and entering into the judgments of each individual: so that it is not, perhaps, too much to say, that on general subjects the common opinion of the law is the highest and best evidence of what that law is.

There is a strange and wonderful interest attaching itself to every description of insanity. The subtle relation existing between the material and immaterial man, that intimate association of mind with body, acting and reacting sympathetically upon each other, is at all times a subject of interesting and curious speculation. But when examined in connexion with derangement of the mental powers, it becomes a mystery passing the ken of human knowledge, around which the light of science sheds no illumination, and gives token of no discovery. On other subjects, investigation repays us with a fixed and satisfactory result; we congratulate ourselves with the discovery of truth, and the establishment of those general principles upon which the sciences are based. It is a pleasure that springs out of certainty and system, and a harmony that rises from many voices mingling in unison.

But on this subject we have no system: it is all mysterious and uncertain, complex and wonderful, as are the operations of the human mind. For though we are able to understand many of the influences that operate remotely to induce insanity;—though we can speak of the phenomena that attend it, and sometimes point out the *causes* that seem to have produced it;—though we can trace its stages through disappointment, melancholy, wakefulness, and a sad brooding over real or imaginary wrong, observe the freaks of fancy, the odd conceits and strange devices that occasionally denote the source of madness;—though we can sometimes discover and pronounce upon the subject around which the brittle thread of reason was broken;—our skill is at fault, and fails us when we attempt to classify the causes, or speak with accuracy of a general origin of mental disease. Each case is so peculiar, it furnishes a law for itself.

In the tragedy of *Hamlet* it has long been a question among critics whether the great master intends to portray actual or assumed madness. Soon after seeing his father's ghost, we find him swearing his friend, Horatio, to silence and secrecy, intimating his intention "to put an antic disposition on," the better to cover his proceedings. Directly we hear him lamenting his feebleness and want of spirit in such a style as convinces us of the deep melancholy that has settled on his mind, and darkened his prospects. He is called to a mighty work, and feels himself incompetent to the task. His nature is noble; he has been accustomed to believe in the sincerity of his companions, and to trust the integrity of the king. He has been surrounded from infancy with flatterers, and those who have courted him as the heir-apparent to the throne. He has yielded himself to the protestations of friendship, and to the soft, winning accents of tenderness and love. The gaieties of life have thrown a charm around him, and his youth has passed away like the sweet influences of spring, the bloom and beauty of the year. He has not known disappointment, nor anticipated danger; the smooth current of his being has flowed like a river.

From such a life he is suddenly aroused to new thoughts. The death of his father was not natural—there was a strangeness about the circumstances, a solemn show of grief, a haste to close over the grave, and a grasping of the crown, that threw a shadow and a doubt over him that wore it. There are no witnesses to the deed—the act was done in silence. No eye saw it, and no tongue has spoken of it. But it was a bloody deed, and cries for vengeance. The ghost of the murdered man cannot rest in his grave, but wakes to walk the earth at night, and whisper of the foul treason; how he was cut off in the blossom of his sin, and sent to his account with all his imperfections on his head. "Unhousel'd, disappointed, unanel'd." The manner of the murder is known, and Hamlet is commissioned to avenge the most foul and unnatural crime. Henceforth he is a new man; the pleasures of life pall on his taste, and the objects that have occupied his attention have been changed, as by the touch of magic, into the veriest baubles. His deep spirit has been stirred within him, and one great passion controls and masters every thought. His mind is unnaturally active, but his purposes are weak, and dispose him to meditation. He believes, and yet he doubts, and so devises a scheme to catch the conscience of the king, and assure himself that he is not beguiled by the devil; for he is still uncertain about the character of the fearful and dread apparition. In this state of suspense, everything becomes suspicious and questionable. The world is not what it used to be. Hamlet contemplates suicide, and runs over in his mind the prospects of a future life, the sleep of death, the dread of something after death, the clouds and darkness that hang over the undiscovered future: he then glances at the evils of the present life, and multiplies them, and magnifies

“The scorns of time,
The oppressor’s wrong, the proud man’s contumely,
The pangs of despised love, the law’s delay,
The insolence of office, and the spurns
That patient merit of the unworthy takes.”

By and by, in his interview with his mother, he undertakes to speak to her of her crimes, grows warm with the theme, utters words of burning sarcasm, bitter hatred, terrible and scathing rebuke. When in the very height of his passion and fiery denunciation, his father’s ghost again appears, charging him

“Do not forget—this visitation
Is but to whet thy almost blunted purpose.”

The mother observes his manner as he listens to the strange visitor, and questions him, that he bends his eye on vacaney, and holds discourse with the incorporeal air, and calls his vision the very coinage of his brain, an eestasy. To this he indignantly replies—

“Ecstasy !
My pulse, as yours, doth temperately keep time,
And makes as healthful music ; it is not madness
That I have utter’d ; bring me to the test,
And I the matter will re-word, which madness
Would gambol from. Mother, for love of grace,
Lay not that flattering unction to your soul,
That not your trespass, but my madness speaks.”

He is by turns desponding and energetic. When alone, he seems to question the source of his information, and wonders whether he is not acting under the instigation of some dark and mysterious agency. When in the presence of his mother or the king, no doubt any longer lingers about his mind. The enormity of the crime alone impresses him ; his speech becomes impassioned, and he grows impatient of delay ; but his stormy zeal seems to vent itself in vigorous and violent language, and resolution dies the moment he is left alone. In speech, like all madmen of his mind and temperament, he is perfectly terrible, but in action as weak and unsteady as a child. There is method in his madness, and he appears to act with a preconceived design ; but for all that there is a fickleness and irresolution about him, and a wildness that casts suspicion over his whole character, and leaves us at times in doubt whether we are listening to the insane ravings of a madman possessed of a strange and mysterious plot, or following the course of an injured prince who seeks redress of a wrong beyond the power of the law, and justice upon the head that wears the crown.

We had intended to inquire somewhat carefully into the nature of insanity, the condition of mind, and real ability of the insane. But our limits on this occasion forbid us to do more than simply refer to the subject ; and point out the fact that, among the insane there are but few, not more, perhaps, than one in a hundred, who are *totally* insane, so that a jury might with propriety pronounce them incapable of distinguishing between right and wrong. Most of those confined in our asylums are what we commonly call monomaniacs—their insanity being connected with particular subjects. They are insane on religious questions, on money matters, love affairs, and schemes of speculation : from sickness, disease of the brain, loss of friends, and a thousand other causes, some of which we are acquainted with, while others escape observation.

At present we confine our attention to the legal and moral responsibilities of the insane. And here, if we mistake not, had no rule ever been adopted, and the question were now for the first time presented, whether the law should make any distinction in its treatment of the insane, between what is termed partial and total insanity, there would, we apprehend, be but one opinion. The impossibility of drawing the line between them would alone be sufficient to demonstrate its impolicy, if not injustice. Besides, on a matter of so much

moment and practical importance, a rule that is to be enforced ought to be clearly drawn, so that the distinction need not be left to the jury to make, according as their prejudices or the circumstances of the case may incline. The language of the law should be clear and definite, such as may not be misunderstood by judge or jury. As the rule now stands, the administration of it is exceedingly difficult; it is plain enough *theoretically*, but practically, infinitely difficult to be applied. The witness shows the conduct of the prisoner to be insane; the judge declares that if he be so insane as not to know what is right, he cannot be convicted of crime. Here the jury take the case with almost legislative powers, and set themselves to inquire about the prisoner's capacity to distinguish between good and evil, an inquiry, where insanity is shown, involving difficulties to the jury and dangers to the citizens, to which neither should be subjected under wise and just laws.

Now, under the old principle, as laid down by the early writers, it is quite possible that the law be rigidly enforced while the most monstrous injustice is perpetrated; and this fact alone demonstrates the propriety of such an amendment as will for ever render it impossible to commit so grievous a wrong in the sacred name of justice. Under the present decisions of our courts, they are understood to hold that an individual may be insane in respect to money affairs, and still capable of committing the crime of murder or arson, and so of all monomaniacs. On the immediate subject of their delusion, they are not considered moral agents; on all others they are held to a strict accountability. The man we saw at the asylum at Utica, who considered himself the great financial agent of the state, controlling the operations of Wall Street, and the slightest transactions in the market, coining gold and silver, and sending them forth as a convenient currency for the accommodation of the community—that man, under the legal rule, would not, perhaps, be deemed capable of theft or robbery. The particular nature of his delusion would render it impossible. Not so in reference to other subjects. True, it is thought by some that such an unsoundness destroys the idea of moral responsibility. The law, however, is more rigid and stoical; it holds there may be insanity and a moral sense still remaining in the mind with a responsible judgment, and makes the circumstances of each particular case determine whether the moral sense be entirely destroyed, or only affected by the moral unsoundness. If the individual labour under a single delusion that will not yield to evidence, and remain otherwise sane, the philosophy of the law, as at present expounded, assumes that, upon questions in which the delusive ideas are not necessarily involved, they will have no influence upon the mind; so that if there remain the bare knowledge of right and wrong, the person is capable of committing crime, no matter how strange and absurd may be the action of his passions.

The man Mr. Erskine mentioned in the Hadfield trial, who believed himself the Christ, evidently could distinguish right and wrong. His standing a severe cross-examination so long, baffling the utmost skill of counsel, as well as his complaints against the committee of his estate, showed his sense of justice, and that he appreciated, to some extent, his own rights and relations to others. But for all that, who would think of holding him capable of crime? He really believes himself the Saviour of mankind, and as such, empowered to forgive sins. Shall such a man be punished for the dreamy speculations and uncertain action of a shattered intellect? It would be a monstrous doctrine to maintain, and still more monstrous to enforce. And yet, under the rule, the jury must either make the law what the justice of the case requires, and thereby liberally construe the oath they take, to render a verdict according to the evidence, into a general obligation to do what is right in the particular case; or, they must find the unfortunate man guilty of a crime at which nature shudders.

The true rule, it should seem, would hold, that if a man be insane, the law ought to regard him as an infant, incapable of crime. It should not be a

question whether he knows right from wrong, but whether he be sane or not; for if he be a monomaniac, he should not be punished, even though a jury be able to say, upon their oath, that he knew the act he performed was wrong. The association of ideas in the mind of the insane is too subtle for our comprehension, and the mystery of his motive too profound for our investigation. We assume to punish guilt, because we understand what constitutes crime in the case of a sane man; possessing, as we do, his thoughts and feelings, with enough of his motives to enable us to pronounce upon his conduct. But in respect to the insane, who knows the operations of his mind, or what dark power reigns over him? Who can enter into his spirit, or explore the labyrinth of his inconceivable thoughts? What can become so like him as to take upon himself *the very feelings of insanity*, and understand him as we understand each other? We are none of us able to do so. Would it not then be modest in us to waive a principle of law implying such knowledge?

In children, we frequently discover (or think we do) a knowledge of right and wrong, long before any man of sane judgment would think of holding them responsible for crime. The moral sense seems to grow with the faculties. It is at first feeble, its existence barely appearing to our observation. Gradually it becomes stronger, as the mind itself approaches the stature of manhood, so that the time when it assumes the guidance of conduct, and the child becomes capable of contracting guilt, is always doubtful and difficult to fix, depending, as it does, so directly upon the mental growth, the complete and harmonious development of each attribute and quality of mind. The moral sense—what is it indeed in any case but the simple judgment of a mind in which the intellect and sentiments unite in healthy activity? As we speak of it sometimes, a stranger to the common phraseology would think us talking of some imaginary being above and beyond us, when, in reality, we mean to discuss simply the mind's capacity of feeling and acting rightly; a capacity depending equally upon the natural action of the passions, and the perfect use of reason. This is our reasoning when we speak of children; why should we not apply the same principles, and allow ourselves to be governed by an equal sense of justice, when we come into the presence of reason-bereft and strangely-afflicted children of misfortune?—*American Review*, vol. viii. pp. 269—275. New York.

To Correspondents.

NOTWITHSTANDING *two* additional sheets are given with this number, we are reluctantly compelled to postpone for the present the publication of several articles and reviews now in type. An elaborate analysis of a charming volume, entitled "Psychological Enquiries," will appear in our October number, along with critical notices of several French, American, and English journals and works. We had prepared for insertion a full report of the recent meeting of the "Association of Medical Officers of Hospitals for the Insane," held at Freemasons' Tavern, but cannot find space for its insertion. An account of the proceedings of this body will be published in the next number of the "Asylum Journal," and to this periodical we refer our readers. In justice to Dr. Jamieson, of Aberdeen, we are bound to state that the passage referring to the eccentricities of Dr. Johnson, quoted at the conclusion of the review that appeared in our last number of Dr. Mayo's Lectures, and Mr. Knaggs' work, was taken from that physician's "Lectures on the Medical Jurisprudence of Insanity." We were under an impression that Mr. Knaggs had quoted it, but we were in error.

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ART. I.—PSYCHOLOGICAL INQUIRIES.

So long as metaphysicians limit their inquiries to the laws of mental action, and omit therefrom an investigation of the organic conditions under which that action takes place, so long will mental philosophy, and the whole theory of human nature in all its aspects, be incomplete. The power of the soul over the body has been amply illustrated, because little physiology and less anatomy are requisite for the inquiry; the power of the body over the soul, on the contrary, has been left in obscurity, because a profound physiology, a correct anatomy, and a large experience of human nature in its ordinary aspects, are necessary to its elucidation. The speculative philosopher, withdrawn from the world, and abstracted in the contemplation of his own consciousness, knows little of these requisites; the observant, experienced, and scientific medical practitioner knows much. Such an one (as may be deduced from internal evidence) is the author of the charming little volume before us,* and such appears to be the opinion he has formed. He remarks:—

“It is the business of medical practitioners to study not only the influence of the mind on the body, but also that of the body on the

* Psychological Inquiries: in a Series of Essays, intended to illustrate the Mutual Relations of the Physical Organization and the Mental Faculties. London, 1854. 12mo, pp. 264.

mind; and in so doing, they have the opportunity of learning, more than others, to trace moral effects to physical causes. Where others complain of a fretful and peevish temper, it may be that they are led to make allowance for the difficulty of self-restraint where there is a superabundance of lithic acid in the blood, or an organic disease of the viscera. In the catalepsy induced in a nervous girl by the so-called mesmeric passes, they see only one of the numerous phases of that multiform disease, hysteria; and in the mischievous, and sometimes even in the benevolent enthusiast, who by his sincerity and earnestness enlists in the cause which he undertakes the sympathy of the multitude, their more experienced observation will often detect the commencement of illusions and the germ of insanity."

Not that the shrewd common-sense of mankind has not readily detected many relations between the corporeal condition and the mental state, and advises you, if you would secure a favour from your patron, to ask it after dinner, and not before. Practical views are not overlooked. The midnight debauch is equally as potent in its influences on the soul as fasting.

"—— Quin corpus onustum
Hesternis vitiis animum quoque prægravat unâ,
Atque affigit humo divinæ particulum auræ."

"It would, however, be a very great mistake to regard this kind of knowledge as being altogether peculiar to medical practitioners. In fact, the connexion between the mind and body is in many instances too palpable to be overlooked by any practical observer of mankind. For example, it is referred to by Lord Chesterfield, when he says that many a battle has been lost because the general had a fit of indigestion; and you may recollect that I stated on a former occasion that Mr. Chadwick had already exposed the operation of living in an unwholesome atmosphere as inducing the habit of gin-drinking, with all the frightful moral consequences which follow in its train. Still, it must be admitted that members of the medical profession have better opportunities of obtaining knowledge of this kind than most other persons; and hence it is that in many things which, even in these days of education, and in spite of the advancement of knowledge, others regard with wonder, as the result of some unknown and mysterious agency, they, with some rare exceptions, see nothing that is not to be explained on well-known principles, or in any degree more remarkable than the exploits of M. Robin or other conjurors."

Practitioners have attempted from time to time to *popularize* their knowledge on these important psychological subjects, hoping that that knowledge would constitute an effectual antidote to the belief in the follies and knaveries incidentally referred to in the paragraph just quoted. Unfortunately, the mode adopted has proved little to the taste of these credulous people, whose most agreeable mental aliment is excitement; those only with such mental endowments as restrain them from a wild credulity, appreciate the depth and force of the arguments advanced.

In the present volume we have an attempt of this kind undertaken with skill and taste, and, therefore, more probably successful. Less classical and technical, and less profound than Sir Henry Holland's kindred and admirable work, "Chapters on Mental Physiology," it is perhaps the more readable by the non-professional but intelligent public.

The book is written in the form of a dialogue between a London surgeon of large experience, named *Ergates* (a worker), a member of the legal profession, *Crites* (a judge), and an enlightened politician—a retired right honourable, designated *Eubulus*. The two latter advance such objections to the physiological and psychological views of *Ergates*, or adduce such corroborations as would naturally arise in the minds of men of cultivated intellect and large experience of mankind, but without that special information which the observant and scientific practitioner possesses in virtue of his profession and his office.

The opening of the first dialogue introduces us to the *personæ* of the conversation. *Ergates* is the speaker.

"The Session of Parliament was drawing to a close. Ministers took advantage of the approach of the grouse-shooting season to hurry through the two Houses the various Bills which they could not venture to postpone for another year. Some official and professional persons still lingered in the clubs, but the houses in the squares were deserted, and there was an end for the season of what is called *κατ' ἐξοχήν*,—London society. Meeting accidentally a friend, whom I shall distinguish by the name of *Crites*, I expressed my surprise at seeing him still in London. 'Our court,' said he, 'has been sitting later than usual, but I am now emancipated, and I am about to pay a long-promised visit to our friend *Eubulus*. I know that it would afford him the greatest pleasure if you would accompany me as his visitor.'

"*Eubulus* had been my intimate friend in early life. As boys, we had wandered together through our native woods; as young men, we had similar pursuits and tastes, had admired the same poetry, and had speculated together on subjects beyond the reach of human wit; but afterwards, being engaged in different professions, and our roads in life lying in different directions, we had parted company, and, as we travelled onwards, had only occasional glimpses of each other. Still, whenever we met, the influence of old associations remained unimpaired; we were as intimate as formerly, and seemed to know more of each other than of any friend whom we had acquired at a later period of life.

"It was two or three years before the period of which I am now speaking that *Eubulus*, finding that his health was scarcely equal to the duties of the office which he held, and that between what he had obtained by inheritance and a retiring pension he had sufficient fortune to meet the reasonable demands of himself and his family, had gone to reside on a property which he possessed at the distance of a hundred miles from the metropolis; and here he had repeatedly urged me to be his guest. Nothing could be more agreeable to me than the proposal which *Crites* made, and the result was, that in less than forty-eight

hours we were both seated in a carriage on the railway, and, in the course of a few hours more, were set down within a mile of our destination."

We have given this quotation at length, to illustrate the natural and unaffected style of the author. The house and landscape are then described, and the feelings of the old friends or schoolfellows on renewing their social intercourse, are analyzed. We cannot refuse our readers the pleasure of perusing the following passages:—

"It seemed at times as if we had gone back to the period of our early life. We expressed ourselves as freely as when we were young, having before us the unknown country which we were about to explore. Still we were sensible that we were not what we had been formerly. The world was no longer that fairyland which our imagination was wont to furnish with its own images. We knew it, and the people in it, and we knew ourselves, better than when we began our journey. We had lost the joys of hope and expectation, but we had lost also many of the anxieties which not unfrequently obscured our brighter visions, and years had not rolled over us without leaving us, in the realities of life, many worthy subjects of contemplation."

The friends thus met became for the while peripatetic philosophers, and their host's domain and neighbourhood their "groves of Academe." They were each glad to leave the whirl of life and its wearying routine for the more congenial pursuits of philosophy. Such seem to be the nearest approach to the intellectual enjoyments of the future and better world, provided they are directed to the highest and holiest objects of investigation.

—— "What if earth
Be but the shadow of heaven, and things therein
Each to other like, more than on earth is thought?"

In giving a critical analysis of this work, we shall deviate from the plan of our author, because the limits allotted to us are restricted. Our analysis must, in fact, end in a *synthesis*. And first we take our author's opinions as to mind and matter. The panoramic view of an extensive landscape in one of those days preceding rain, when the atmosphere is unusually transparent, raises the imagination to high thought.

" 'I never,' said Eubulus, 'find myself left to my own contemplations in a situation such as this, without a feeling of wonder at myself and my own existence. Here am I,—I mean I who feel and think,—pent up within the narrow dwelling of my own body, yet taking cognizance of things remote in space, not only of those which belong to our own world, but of those in the vast universe around us. Marvellous as this may be, let us wait but for a few hours, and we have what is still more marvellous. By the aid of a tube and a few glasses, I may become acquainted with other objects, suns, and worlds, distant from us not only in space, but also in time, which I see not as they now are, but as they

were many thousands of years before I myself was in existence. I do not say that such reflections prove more than may be proved in other ways, but they certainly impress my mind more strongly with the conviction that, as a percipient, conscious, and intelligent being, I belong to a mode of existence wholly different from that of the senseless bodies by which I am surrounded, and that (even independently of the evidence afforded by revelation) there is nothing unreasonable in the universal expectation of mankind (so universal, indeed, as to have almost the character of an instinct) that there is something in us which will remain, and be capable of perception and thought—and it may be of pure and high aspirations—when the gross material fabric with which it is now associated has become resolved into its original elements.’”

To the argument of the materialist, that we know nothing of mind except through organization, it is answered, the existence of one's own mind is the only thing of which we have indubitable knowledge; it is, in fact, as much a contradiction to doubt the existence of one's own mind as that two and two make four. Then there is the evidence in favour of something distinct from “senseless” matter presented by the phenomena of creation, in which from the grandest to the smallest, from those presented in boundless space by vast orbs in relation to each other, to those presented by microscopic cells and nuclei—also in relation to each other—there is one ever active, ever constant something present, by virtue of which something the phenomena are all guided in orderly sequence to an object as surely as the masses of senseless matter are regulated by the force of gravity. It is as certainly demonstrable that there is a designing and intellectually regulating force, as that there is a centrifugal and a centripetal force. Our author states that the evidence of intention and design is more especially manifested in the vegetable and animal creations. In this we differ from him: it is certainly more obvious, but it is as fully manifested in the planetary movements, and other Cosmic phenomena. In the twenty-first and twenty-second chapters of “*Paley's Natural Theology*,”* numerous illustrative facts are stated. In a note to chapter twenty-fifth† is also an illustration drawn from *La Place*. It is to the effect that the rising again of the sun on the morrow of any given day “is above two million times less probable than the truth of the position that the motions in our system were designed by one First Cause.”

Mind and matter, then, do both exist. Of that proposition there can be no reasonable doubt; but inasmuch as there be they who do doubt, let us, for the sake of a starting-point, allowing that

* With Illustrative Notes by Lord Brougham and Sir Charles Bell. 1836. Vol. ii. p. 1.

† Ed. cit. p. 102.

matter only has existence, come to some understanding as to how we shall designate that something which constitutes our self-consciousness, and how we shall describe that which so operates as to carry on phenomena to the completion of a special and particular purpose; which purpose being attained, we are happy or pleased, or things continue in the same pre-arranged order; but which purpose *not* being accomplished, we are unhappy, or suffer pain, or things are in another order than that which is normal,—i.e., *disorder*. We ask the materialist how he would designate this designing, effectuating, something in creation, and this feeling, thinking, willing agent in ourselves? To call either a property of matter is to tell us nothing, for in no respect does it resemble any one of the *recognised* properties of matter. Turn the subject how we may, we come inevitably back to the common conclusion of mankind, and designate it as MIND.

Mind, then, is alike at work in creation, and in the wonderful vital mechanism termed Man. How far is the one form identical in its essence and modes of action with the other? As to vertebrate animals, the common nature and mode of action of mind is an acknowledged fact. It is true that from time to time specific differences are erroneously constituted into generic by those who endeavour to exalt man by separating him, whether considered in his mental or corporeal relations, from his fellow-creatures below him in intellectual development. This is, however, not in accordance with observed facts. The argument for the identity is well put by the author.

“ERGATES.—It may be, as I observed on a previous occasion, that some of those which are usually regarded as the very lowest form of animal life, have no endowments superior to those which belong to vegetables. Setting these aside, however, I apprehend that no one who considers the subject can doubt that the mental principle in animals is of the same essence as that of human beings; so that even in the humbler classes we may trace the rudiments of those faculties to which, in their state of more complete development, we are indebted for the grandest results of human genius. We cannot suppose the existence of mere sensation without supposing that there is something more. In the stupid carp which comes to a certain spot, at a certain hour, or on a certain signal, to be fed, we recognise at any rate the existence of memory and the association of ideas. But we recognise much more than this in the dog who assists the shepherd in collecting his sheep in the wilds of the Welsh mountains. Locke, and Dugald Stewart following him, do not allow that ‘brute animals have the power of abstraction.’ Now, taking it for granted that abstraction can mean nothing more than the power of comparing our conceptions with reference to certain points to the exclusion of others—as, for example, when we consider colour without reference to figure, or figure without reference to colour—then I do not see how we can deny the existence of this faculty in other animals, any more than in man himself. In this sense of the

word, abstraction is a necessary part of the process of reasoning which Locke defines as being 'the perception of the agreement or disagreement of our ideas.' But who can doubt that a dog reasons while he is looking for his master, whom he has lost; or when he is seeking his way over an unknown country?"

It is added, that "the minds of the inferior animals are essentially of the same nature with that of the human race; and that of those various and ever-changing conditions of it, which we term the mental faculties, there are some of which we may not discover traces, more or less distinct, in other creatures." This is a fundamental principle of the highest importance in psychological researches, for, placed in another form, it is this, *that the nature of the human mind and its relation to organization may be investigated through the mental phenomena of the inferior animals.* If a psychologist, thoroughly imbued with the truth of this proposition, sees in all the acts of these, his lower fellow-creatures, the reflected image of the working of his own mind, he cannot watch the instinctive or other acts of the smallest or lowest, without feeling those touches of nature which make the whole world kin; or without obtaining wonderful glimpses into his own mental being, and thus day by day acquiring fresh knowledge. Nor will his observations and sympathies be limited to animals, for as the mind evolves the ideas which naturally flow from so suggestive a principle, it passes from one gradation of life to another, ever descending by imperceptible steps, until at last the ever-varied phenomena of vegetable life are brought into the same category, and the identity with his own of *mind in creation*, as well as in animal life, is made manifest.

—"By gradual scale sublimed,
The vital spirits aspire, to animal,
To intellectual; give both life and sense,
Fancy and understanding; whence the soul
Reason receives, and reason is her being,
Discursive or intuitive."

The fact is, that no man is properly qualified to observe, compare, and estimate these mental phenomena in the organized beings below him, until he has thus descended from that lofty pedestal upon which his pride of place has exalted him. That pride hinders the operation of his powers, whether of observation or of reflection, by restricting them to the narrow sphere of his own life. His prejudices blind him, or pervert his judgment; they harden his heart by contracting his sympathies; and so the hidden chords of his nature, which are in unison with those of the creatures below, rarely vibrate to the awakening of new ideas, or vibrate but imperfectly. The vast field for that comparative psychology which can alone release us from the circle of

metaphysical subtleties in which we have hitherto trod, is partly indicated in the following quotation:—

“If even a portion of the observations made by the younger Huber on ants be well founded, these little creatures must be regarded as possessing, in addition to their instincts, no small portion of intelligence. It is observed by a modern writer, that there is hardly a mechanical pursuit in which insects do not excel. They are excellent weavers, house-builders, architects. They make diving-bells, bore galleries, raise vaults, construct bridges. They line their houses with tapestry, clean them, ventilate them, and close them with admirably-fitted swing doors. They build and store warehouses, construct traps in the greatest variety, hunt skilfully, rob. and plunder. They poison, sabre, and strangle their enemies. They have social laws, and common language, division of labour, and gradations of rank. They maintain armies, go to war, send out scouts, appoint sentinels, carry off prisoners, keep slaves, and tend domestic animals. In short, they are a miniature copy of man rather than of the inferior vertebrata.* Of these things, which have been thus graphically described, much may indeed be referred to the operation of instincts, or to what Dr. Carpenter terms ‘unconscious cerebration:’ but surely it involves a considerable *petitio principii* not to refer a part of them to a higher principle, bearing a resemblance, however remote, to human intelligence.”

The attention of naturalists has been too exclusively directed to a few leading instincts in lower animals, such as the conservation of life, the union of the sexes, &c. But there are numerous emotions and passions displayed by them less obvious than these, but not less instructive. Of this kind is the following instance of a domestic tragedy, consequent on the hopes of “a son and heir,” entertained by a pair of canaries, being utterly blasted. A lady of our acquaintance possessed the birds, and related to us the melancholy history. After the usual period of pairing, the hen bird commenced the process of incubation, and nothing could exceed the affectionate gallantry of her mate while thus engaged. His song was never wanting to cheer her, and in a variety of ways he showed the warm interest he took in her proceedings. At last the allotted period expired, and sad to relate the eggs were addled. So soon as the male found that no young birds appeared to share his affections with his mate, he fell upon her, and a severe combat ensued. It never occurred to the owner of the birds that the affair was anything more than a transitory love-quarrel, until the two birds fell exhausted, and both shortly died. It was found that in the combat they had stripped each other’s breasts bare of feathers. So much for a family disappointment and its results.

* Dr. Laycock’s Review of the Chapter in Dr. Carpenter’s Human Physiology, ‘On the Functions of the Nervous System,’ British and Foreign Medico-Chirurgical Review, No. XXIII., p. 10.

Nothing is more human than the *emulation* of song birds in the production of their song. Various examples of its fatal effects are related in books on natural history and on the instincts of animals. The singular use to which it is applied by bird fanciers amongst the lower classes, in the way of singing matches, not being generally known, is worthy of mention. These matches usually come off at some public-house or tavern consecrated to "the Fancy,"—one of these is thus described in "The British Temperance Advocate:"—

"Several members of the fraternity had brought little square bundles wrapped up in handkerchiefs; these proved to be small birdeages, each containing a pet bird. One man, opening his cage, put in his forefinger, upon which he brought out a lively goldfinch, which he offered 'to whistle again any bird in the room for a crown.' It seemed that the little songster was a celebrated prima donna in its way, and had earned the name of Jenny Lind. 'Don't you wish you may get it?' was the jeering inquiry from several voices. 'Give the long odds, and I'll match Piper again him,' bawled one; but the proposition was not accepted. The little bird plumed itself proudly, and uttered a note of defiance. 'Cock-a-doodle-doo!' screamed its proprietor; 'all afeared on yer, Jenny, that's what it is, my beauty—champion of all England, my little pinch o' feathers. Who bids ten guineas for the champion?' 'Not champion yet, if *I* know it,' said a voice from the abyss of sickening vapour; and a man stepped out of the gloom, bearing a bird perched on his knuckle, as closely resembling the redoubtable champion as it is possible to imagine. He accepted the challenge on behalf of his *protégé*, and producing his money, seated himself in a chair, rested his elbow on the table, and held forth his forefinger as a perch for the bird; the other did the same, while a third person lighted an inch of candle, and stuck it on an upturned pewter-pot between the competitors. The lists thus prepared, the challenger gave the signal by a peculiar sound, produced by drawing the air between his lips, and Jenny, after a few low and preparatory flourishes, burst into song. The rival bird responded in a strain equally loud, and both sang in evident emulation of each other, and by degrees stilled all other sounds in the room, save the snorting puffs that rose from some half hundred pipes. *The little creatures grew wondrously excited; their throats swelled, their tiny feathers ruffled up, their eyeballs rolled, their backs yawned and quivered, while, without an instant's pause or let, amidst that horrid reck of filthy tobacco, through which their forms were but just visible, still rushed the stream of song.* One would have thought such an atmosphere would have poisoned them, but both were plainly proof against it; and when at length the rival bird ceased, and fluttered down upon the table, it was from sheer exhaustion of physical strength, and lack of further power of endurance. Jenny, as usual, had won the day."

In comparing the working of the instincts in lower animals with the mental phenomena of man, it is easy to discover decided differences

the similarities are not so much on the surface. When estimating the relations of the two classes of phenomena, it has been too much the practice to use the terms "instinct" and "reason" as antagonistic, or at least as dissimilar to a greater extent than indeed they are. So also with regard to other terms, as "voluntary" and "involuntary," and the like: we find that vague ideas and meanings are attached to them; from this vagueness ideas more vague flow, and the mind fails to perceive the true relations of things, not far severed, although apparently so. An instance of this kind is to be found in the following passage:—

"CRITES.—I may venture to make an observation which I should have made before if I had not been unwilling to interrupt the conversation. When you speak of instinct, contradistinguished to the higher faculties of the intellect, I conclude that you refer to it as a principle by which animals are impelled, independently of experience and reasoning, to the performance of certain voluntary acts which are necessary to their preservation as individuals, or the continuance of the species, or in some other way convenient to them. Now, I would ask if it be quite clear that this distinction is well-founded? Has it not been the opinion of some physiologists that, by a careful analysis of what are called instinctive actions, they may be traced to the operation of experience, quite as much as those which are palpably derived from this source?"

In this passage, animals are considered as being "impelled" to the performance of "voluntary" acts, but the terms are evidently contradictory, for that which is impelled is also compelled—a state incompatible with *voluntary* action, if by that term we mean action consequent upon an exercise of the WILL. It is, perhaps, intended to designate by the term voluntary those actions which would result if reason and will guided the animal; if that be so, it is hardly a correct use of the term. There may be, it is true, what may be termed an *instinctive* will, but then this differs widely from the rational will. How great is the difference is shown by the histories of shipwrecks, and other casualties, in which men have experienced the sharpest impulses of the instinct of hunger, to the utter discomfiture of that rational will by which, under ordinary circumstances, he is guided. In a less degree, but still obviously enough, it is manifest in the numerous instances in which man yields to temptation, and indulges his instincts and passions—a condition well known to ethical philosophers, and the source of which is tersely described by the Apostle Paul, in his own case, as "the flesh;" or, in the sententious words of Pope—in which self-love stands for all the instincts, the passions being "modes of self-love"—

“Two principles in human nature reign ;
 Self-love to urge, and reason to restrain ;
 * * * *
 Self-love the spring of motion, acts the soul ;
 Reason's comparing balance rules the whole.”

Now, the difference between instinct and reason is this, that reason acts with knowledge of the order of events, instinct without knowledge. Reason knows, and therefore adapts variously ; instinct knows not, and therefore acts, according to a fixed adapting rule, blindly. Between the two extremes there are different degrees of knowledge, and, consequently, there are acts which are not wholly instinctive nor wholly rational. The “luminous exposition” which Lord Brougham has given of the mathematical accuracy with which the bee constructs its hexagonal cell, is alike a valuable example of a *pure instinct* acting *apparently*, but not really, with a profound mathematical knowledge, and of the *pure reason* which manifests that knowledge by the demonstration of the precision with which the instinct works. There are, however, an infinite variety of similar illustrations of instinctive science to be drawn from the instinctive acts of animals ; as when they are

“Prescient the tides or tempests to withstand,
 Build on the wave, or arch beneath the sand ;
 Or like the spider, parallels design,
 Sure as De Moivre, without rule or line.”

The perfection of this instinctive *science* is not less wondrous than its universality, for its guiding principles, as displayed in many instinctive acts, have yet to become part of our natural philosophy. We have used the term science, but it is certain that in all these there is no science in the sense of *knowledge* as there is in the analogous works of man. How or whence, then, do these instinctive powers spring ? They are part of the organism, connected therewith by that intelligent, designing something in creation we have termed mind—an adapting, directing force, as inherent in living organisms as the force of gravity in matter, and like it proceeding from the Divine Mind.

Let us now accompany our author in his consideration of the human instincts. First, there are those for the immediate conservation of the organism—hunger, thirst, defence. The *social* instinct of man is thus treated :—

“Man could not exist as a solitary being. He has neither swiftness of feet, nor any natural means of offence and defence, which would enable him to compete with the buffalo, the lion, or the wolf. It would have been of little avail to him if the Creator had left it to himself to learn by hard experience that he can procure his own safety, and his means of subsistence, only by associating with others. The desire to live in society is as much an instinct in him as it is in the bee, or the ant, or the beaver, or the prairie dog. Ought not this to

settle the disputed question as to the existence of a moral sense? For how could mankind live in society, helping and protecting each other, and joining in common pursuits, if they were not so constructed as to sympathise with each other in their joys and sorrows, and if they did not feel individually that they owe to others what they expect others to offer them in return? Experience and, if you please, self-interest tend to confirm, to refine, to exalt these sentiments, but they do not create them. The child is led to seek the society of other children by an impulse which he cannot resist, and which is independent of any intellectual operation. But having done so, his moral qualities, which would otherwise have remained in abeyance, are gradually developed, and (except there be some actual imperfection of the mental faculties) the power of distinguishing right from wrong, justice from injustice, follows as a matter of necessity, the result of an innate principle, and not of anything acquired."

All this is very admirable, because very true. It must not be forgotten, however, that this same doctrine is applicable to the intellectual as well as to the moral faculties. The artistic *genius*, considered as a man with *innate* powers for excellence in art, is none other than a man in whom the *instinctive* working of the mind in its special direction is nearly perfect. The illustrations of "unconscious cerebration" given by Dr. Carpenter, are drawn from a manifestation of artistic excellence which was instinctive in its possessors—Mozart, Beethoven, Coleridge. Nothing is more certain than that the poetic faculty is instinctive—*Poeta nascitur non fit*. Perhaps the instinctive working of a purely intellectual faculty is best shown in those instances in which there is the singular intuitive ability to carry on the operations of arithmetic, mentally, through a long array of figures. In all the instances we know of, the individual was hardly, if at all, conscious of the steps of the mental process; he performed it as readily as he combined any set of muscles to a given purpose; but when he proceeded to perform the calculation like ordinary mortals (and this is the strong part of the general fact), he felt it to be difficult and laborious, and was longer than most ordinary men would be. The latter method was acquired, in truth—the former was instinctive.

Let us turn now to our comparative psychology, and supply man with his instincts complete. What would he be? He would be as perfect a mathematician in his constructions as the bee; his sense of music would be perfect, of harmony of colour perfect, of form perfect; his hand would do the bidding of his instinct, and exquisite concords of sweet sounds, lustrous colouring, and perfect beauty of form would be the result. And so in every instinct manifested by lower creatures would that macrocosm—man, be complete, the most perfect of the works of the Almighty.

Now, it is not difficult to conceive an ideal man—that is to say, with intellectual and moral faculties so complete, and an organization so perfect, that he could act with all the certainty of full knowledge and all the precision of intuition—the powers of instinct and reason combined. Has man ever so existed? As to the lower instincts, the author of the “Psychological Inquiries” answers affirmatively,—as to the higher, he is silent; but leans, we think, to the doctrine of progressive development:—

“We cannot but suppose that when man first began to exist, and for some generations afterwards, the range of his instincts must have been much more extensive than it is at the present time. We see the infant first deriving nourishment from his mother’s breast; but when the period of lactation is over, the experience of his parents supplies him with the fit kind of food derived from other sources. The absence of such experience must, in the first instance, have been supplied by a faculty which he does not now possess (but which we see manifested in the lower animals), directing him to seek that which is nutritious, and to avoid that which is not so, or which is actually poisonous. It is easy to conceive that much besides in the habits and actions of human beings which seem now to be the results of experience and imitation, was originally to be traced to instinct; and, indeed, there are many things which cannot well be explained otherwise. I do not venture to say that from this source he first derived the use of fire: yet it does not seem that in such an instinct there would be anything more remarkable than in that which leads the bee, with the skill of a mathematician, to construct his hexagonal cells.”

These are curious speculations—more curious than useful; but it is *the* chief distinctive characteristic of man, emphatically, to be ever seeking to *know* his nature, origin, destiny. What if man were at his origin more perfect than now? What if the being now on earth be not rising to a higher than his original constitution, but rather recovering from a degradation into which he has fallen? There are facts in the natural history of man, and analogies in the histories of extinct races, which would at least cause us to hesitate in accepting that mythological doctrine of man’s primæval origin and condition which has descended to modern times (unquestioned almost) through successive ages.

In the preceding considerations we have not referred to man’s *religious* nature; this also has its foundation, like his intellect, in instincts. The author of the “Psychological Inquiries” advocates this view to a certain extent:—

“The disposition of man, even in his most degraded state, to believe in supernatural agencies is so universal, and so manifestly the result of his peculiar constitution, that we must regard it as having very

much of the character of an instinct. As he advances in knowledge, and has leisure for observation and reflection, the perception of the beauty, grandeur, and harmony of the universe, of the evidence of intention and design, and of the adaptation of means to ends in everything around him, and of the large amount of good with the small proportion of evil which is manifested in the condition of all living creatures, leads him to the knowledge of an intelligent and beneficent Creator, to whom he *may* at any rate be responsible for the right use of the faculties with which he is endowed; and thus the religious sentiment becomes engrafted on the rude instinct of the savage."

The belief in supernatural agencies is not, it need hardly be stated, an instinct of the rude savage alone. Instances of modern belief in agencies of this kind are as common amongst the more refined and educated classes of civilized nations as amongst the rudest of semi-civilized or barbarous people. The believers in Mesmeric delusions, spirit-rapping, &c., are to be found in the highest ranks in this country.

Is the belief in those "primary and fundamental truths, the knowledge of which is forced upon us by our own constitution, and is independent of experience and reason," to be regarded as instinctive in its nature? Our author places them in a higher category:—

"It has been shown that instincts are far from being constant and immutable; as under a change of circumstances certain instincts are lost, so are others generated. Even those which are of the greatest necessity, which seem to be the most constant, may, under certain circumstances, be found to be wanting in an individual on [in] whom they had been fully developed previously. But it is otherwise with those articles of primary belief which are represented as the foundation of all our knowledge. However strange may be the illusions of the lunatic, or however convincing the arguments of the metaphysician, neither the one nor the other can escape from the belief that there is an external world independent of himself, or that what he remembers to have happened did actually occur. Taking these things into consideration, it seems not unreasonable to suppose that this class of convictions has some higher source than that which belongs to mere instincts, and that they are actually inherent in the mental principle itself, and independent of our physical organization."

To the first part of this conclusion no objection can be raised; that these beliefs are independent of organization is a proposition the truth of which is to be determined by experiment and observation alone. To our mind they show the converse to be as true of these innate sources of knowledge as of those other which are universally admitted to be dependent on physical organization. They are simply manifestations *through* organization, and *necessarily*, through organization, of what is confessedly inherent in, and indeed an essential characteristic of, the

mental principle, itself distinct from, but necessarily manifested through, organization. Diseases, therefore, of the organization (as in lunacy) will and do pervert and abolish these sources of knowledge. Nothing is more a part of man's nature than the belief in his own existence; yet we have had a patient with the illusion that he was dead. If we adhere to the same definition of instinct as being part of our mental nature which is connate and innate, and by which we act to a given purpose, independently of knowledge drawn from experience, we must still, in common with most modern metaphysicians, term these beliefs *instinctive*, for they are not the less instincts because they involve what is true. On the contrary, all the instincts have this characteristic, most especially in common. Thus, when the paper-wasp makes that beautiful shelter for its young to which it owes its name, and fills it up with animal food sufficient in quantity for the *future* wants of the young being when in a higher stage of development, the instinct by which it operates is prescient of a *future* which will surely come; and this prescience necessarily implies the cosmic idea of a future. In the same way, and from the same principle, the mammæ of the human female, in common with those of all other mammalia, are prepared for the future being long before he is born. In man's mental nature this blind instinctive notion is developed into *knowledge* of the future; but in no other mode than the blind instinct of self-preservation and of abhorrence of destruction is developed into a knowledge of death, and of the means to escape it. Truth—itself inherent in instinct—is, in fact, an inherent part of man's mental nature, and, therefore, the belief in Truth. If the belief in a *future* life, so generally diffused through every tribe of man, be *instinctive* (as it is so constantly said to be), then the existence of that instinctive belief is itself a strong proof that a future life is a part of the great scheme of creation. In the same way the universal belief (instinctive, too, apparently) in the existence of God is a proof of His existence. “Quæ est enim gens, aut quod genus hominum, quod non habeat sine doctrinâ anticipationem quandam deorum?”*

The following quotation from a recent popular writer on moral philosophy (who may, indeed, claim kindred in authorship with the author of “Psychological Inquiries”) is, we think, worth reprint:—“Truth being then, as I conceive, an entirely spiritual and mysterious thing, existing, like electricity, everywhere, but tangible and definable nowhere, it is vain for me to seek the discovery of it, as it relates either to things or people by any process of ratiocination; even in attempting this, I do but get into confusion worse confounded. But, observing that I possess an inner sense, quite distinct from my reason-

* Cicero, de Naturâ Deorum, Lib. i. § 16, 17.

ing powers, which in an exceedingly delicate, small, and humble way influences my apprehensions both of things and people, I wait upon this spiritual instinct as quietly and as reverently as I can; and by this sort of silent attention to its actings I gradually acquire, as I believe, a just conception of the nature of Truth.”* So also Epictetus:—“It is not possible to assent to anything which appears to be not true, because it is the very nature of the understanding to agree to Truth.” And Adam Sedgwick:—“Man is a religious being; * * * and though his ill-guided strivings to grasp the councils of his Maker be as powerless as the efforts of an infant in the nurse’s arms to grasp the moon, still the sentiment remains an inherent part of himself; nor will all the powers of darkness root it out so long as there is a principle of causality dwelling within his soul, leading him to the conception of general truth.”†

We need add no more on this head. The course of our analysis has brought us then to this conclusion—that as to his organization and the working of it, man is possessed, equally with the lower animals, of that great cosmic principle of intelligence, the self-acting *unconscious* mind. It is seen in operation throughout his entire organization. As the “*nisus formativus*,” it outlines, completes, puts in motion the vital machinery. By it the heart is formed, as well as unceasingly pulsates during life; by it the stomach is constructed, as well as continued functionally active; by it the brain is developed, as well as put into its appropriate instinctive working; by it the entire mechanism of the organism is co-ordinated and directed towards the ends which the Creator has designed and predetermined, just as by and through it every organism acts, whether it possess a knowledge of the order of events thus designed and predetermined, or not. That is one side of the question. But superadded—plainly, surely superadded—is that other principle, the feeling, thinking, willing, self-conscious mind; the highest endowment and ultimate destiny of which seems to be a KNOWLEDGE of the necessary order of events in creation, of the means by which that order may be modified so as to be able to use them at will, and of the nature of the Supreme Intelligence from which all this order in creation has sprung. These two great principles meet and co-operate in organization; and the grand problem in the science of human nature is, and ever has been, to determine the relations they bear to each other therein.

We do not propose to speculate at present on this problem; the greatest minds have been bent to it in successive ages, from Plato downwards.

* Visiting my Relations, and its Results, p. 215.

† A Discourse on the Studies of the University of Cambridge. 5th Ed. Preface, p. 145.

For an admirable summary and estimate of the ancient doctrines we would refer the reader to a careful study of Cudworth's noble monument to his own genius and labours—"The Intellectual System of the Universe;" for the more modern views, the works of modern German philosophers may be consulted. The best and most recent English work is Mr. Morell's "Elements of Psychology," reviewed in a late volume of this journal.

To the medical practitioner they all have this radical defect—they are purely speculative; for what he wants as an artist and an "Ergates," is a science that can be *applied*. Such a science must be based on the relations of mind to organization, for it is wholly by communicating a knowledge of those relations that mental philosophy can be rendered available in solving all those practical questions that now embarrass him in his daily routine. What he desires to know is, the nature and treatment of insanity, the limits fixed by changes in the organization to moral responsibility, the connexion between an imperfectly or morbidly-constructed organ and crime, the best method of training and developing the mental powers, and the relations of mind to the varied pursuits of man, whatever be their nature, wherever he be, whatever be his race—the common object of all which —is HAPPINESS. In short, he desires that MENTAL PHILOSOPHY BE INDUCTIVE AND NOT SPECULATIVE.

Now an inductive mental philosophy can only be complete by including the whole range of mental phenomena within its range of inquiry. To separate the phenomena of the human mind from those which we witness in creation, would be not only to shut out from the inquiry the most fertile and most acceptable field of facts, but to take a small part only of the phenomena to be investigated, and that the most obscure. The extract from Bishop Berkley's "Siris," prefixed to the volume before us, has a most striking passage:—"There runs a chain throughout the whole system of beings. In this chain one link drags another; the meanest things are connected with the highest." A grander passage we give from Hobbes, in his own sonorous Latin, and so clinch our argument, not by the weight of his authority, but by the force of his thought.

"Philosophiam noli credere eam esse, per quam fiunt lapides philosophici, neque illam quam ostentant codices metaphysici; sed Rationem Humanam Naturalem per omnes res creatas sedulo volitantem et de earum ordine, causis, et affectibus renuntiantem. Mentis ergo tuæ et totius mundi filia philosophia in te ipso est; nondum fortasse figurata sed Genitori mundi qualis erat in principio informi similis."*

The threefold task of the modern psychologist in summary is this—

* Ad Lectorem, in Elementa Philosophiæ. 4to. Amstelod. 1668.

1. To determine the relations of vital organization to the unconscious or kosmic reason; 2. To determine the relations of the latter to the conscious principle—the *ego* of the individual; 3. To fix the relations of the conscious and unconscious principles in combination to vital organization. The mystery of man's being will be within the reach of his intellect just in proportion as these problems are advanced towards solution. The solution can only be attained by a strict application of the inductive method to metaphysics and mental philosophy.

Something, however, has already been achieved in this direction by the inductive method. The relations of vital organization to the *unconscious* mental principle has been advanced, first, by the doctrines of reflex action, as revived and advocated by Dr. Hall; and next by the extension of those views to the cerebrum by Dr. Laycock. More recently, Dr. Carpenter has given the valued stamp of his approval to the latter, and under the term “unconscious cerebration,” has considered the unconscious action of the brain in processes purely intellectual. We have elsewhere* noticed these doctrines, and refer the reader to our remarks upon them. All we need say here is this, that we believe it is no easy task to bring the mind to the conclusion that acts and processes so constantly, under ordinary circumstances, the result of the will, or at least so necessarily (apparently) accompanied by consciousness, are but automatic in their nature. Even as to the lower range of phenomena, namely, those dependent on the spinal ganglia, and which can be so easily demonstrated experimentally, this difficulty is generally felt; how much more, then, with the higher, namely, the purely cerebral and mental? The following passage may perhaps be considered as affording evidence that this difficulty has been experienced by the author of the “Psychological Inquiries,” in his endeavour to keep pace with the progress of modern neurology.

“ERGATES.—It is true that Le Gallois found that certain lizards lived for a very considerable time after the loss of the head; and that when they died at last, the immediate cause of death appeared to be want. But creatures, under such circumstances, exhibit no sign of anything more than automatic life. Even breathing is suspended, the blood probably deriving the little oxygen which is required, not from air drawn into the lungs, but from being exposed to the atmosphere in the superficial vessels of the skin. It is also true that if the leg be pinched, under these circumstances the muscles are made to contract; but this is no more proof of sensibility than the starting of the limbs, which I have already mentioned as occurring in the human being in tickling the soles of the feet, after an injury of the spinal cord; or the convulsions of an epileptic patient. Then as to the multiplication of some of the lower orders of animals by division, we know so little of their

* *Vide* the Review of Dr. Noble's Lectures on the Correlation of Psychology and Physiology at p. 511.

mode of existence, and it is so entirely different from that of animals of the higher orders, that it really seems to me that we can draw from it no conclusion that would be well applicable to the latter. Is it at all certain that a polypus is endowed with any higher properties than those which belong to vegetable life? Do the motions of its filaments afford any better evidence of sensibility and volition than those exhibited by many plants, such as the *Mimosa sensitiva*, the *Dionæa muscipula*, or the *Hedysarum gyrans*? or than the folding up of many flowers in the night and in rainy weather? or than the motions of the minute bodies described under the name of cilia in animals? Or if the sensibility of the polypus be taken for granted, may it not be a compound animal, with distinct centres of sensation and volition, in like manner as in a tree every bud is, in fact, a distinct individual, which may live and grow though separated from the parent stock? An example of this mode of existence is supplied by an animal much above the polypus in the scale of living beings. The *diplozoon paradoxon* is described by Nordmann as a parasitic animal which attaches itself to the gills of the *Cyprinus Brama*. It consists, in fact, of two animals, united in the centre, so that they have a part of their viscera in common, but with two distinct nervous systems. As far as the latter are concerned there is no reason why each half of this double creature should not live very well, though separated from the other."

There is much truth in some of these remarks. It is quite certain, we think, that there has been too much assumed in investigating the class of phenomena here referred to, as to the existence or absence of feeling or consciousness. The question is one of inference and not of observation, and all experience shows that errors may be easily made either way. Thus the adaptive and conservative nature of the spinal reflex movements are so strikingly indicative of a rational will, that even yet the hypothesis—that sensation is an endowment of the spinal cord, or even of sections of it—is maintained. On the other hand, the entire absence of such movements has led observers to the erroneous conclusion that consciousness is abolished, nay, that vital action has ceased for ever. In some of these cases of apparent death (or trance-like catalepsy) the individual has possessed not only consciousness, but the sense of hearing acutely, and has comprehended every preparation for his impending interment. In the work before us we have the case of an elderly lady who recovered from a stroke of apoplexy; after the fit she lay motionless in (apparently) a state of stupor, and no one doubted that she was dying. After her recovery she explained that she did not believe that she had been unconscious during any part of the attack. She knew her situation, and heard much of what was said by those around her. The case of the late Dr. Wollaston is in various respects an interesting study. His death was occasioned by a tumour of the brain, and the history of his case proved that it must have

existed from a very early period of his life. Yet perhaps that structural change rather enhanced his intellectual powers than enfeebled them, just as a blow on the head has been known to change an imbecile into a powerful mind. We subjoin the following interesting quotation :—

“During his last illness his mental faculties were perfect, so that he dictated an account of some scientific observations which would have been lost to the world otherwise. Some time before his life was finally extinguished he was seen pale, as if there were scarcely any circulation of blood going on, motionless, and to all appearance in a state of complete insensibility. Being in this condition, his friends, who were watching around him, observed some motions of the hand which was not affected by paralysis. After some time it occurred to them that he wished to have a pencil and paper, and these having been supplied, he contrived to write some figures in arithmetical progression, which, however imperfectly scrawled, were yet sufficiently legible. It was supposed that he had overheard some remarks respecting the state in which he was, and that his object was to show that he preserved his sensibility and consciousness. Something like this occurred some hours afterwards, and immediately before he died, but the scrawl of these last moments could not be deciphered.”

As to vertebrate animals, it is, we think, an established fact in physiology, that consciousness ceases with the entire destruction or removal of the encephalic ganglia; so that the trunks of decapitated animals are utterly unconscious and insensible. The ordinary state of the viscera in man in relation to the consciousness, leads to the inference that in the lower articulata (if not in the higher), the consciousness hardly glimmers. But are these deductions applicable to plants? Vegetable life is so universally assumed to be, as a matter of course, unconscious, that it appears a mere folly to express a doubt of the assumption; but let a close observer and admirer of flowers watch carefully their proceedings, on the opposite assumption, namely, that they not only feel but *enjoy* life, and he will be struck with the immense array of facts which may be adduced in support of it. Endow them, hypothetically, with consciousness, and they appear to the observer in an aspect altogether different. Their instincts seem, indeed, *mutatis mutandis*, to be easily compared with those of higher animals. Unquestionably they are in the same category, in this respect, with the lower forms of *animal* life, respecting which it is impossible to determine whether they have consciousness or not.

The doctrines of reflex cerebro-spinal function have advanced our knowledge of the conscious as well as the unconscious mental principle. It is now clearly seen that there is a special arrangement corresponding to the instincts in the ganglia of the nervous system—

the centres of vesicular neurine—in virtue of which they co-ordinate and combine the various machines of the organism to fixed predetermined purposes (instinctive acts), which purposes have a tendency beneficial to the organism. That a nervous system is not *necessary* for such an arrangement in living organisms, is proved amply by the phenomena of vegetative and cell-life; but in the higher animals it is absolutely necessary, apparently from the complexity of the machinery to be co-ordinated and combined. That special arrangement is rendered functionally active by “*impressions*” reaching the ganglia, either through the external senses or from other machines of the organism. Now if consciousness exists, it has its seat either in the ganglion, if there be only one, or in the chain of ganglia, if there be a chain, or in one or more of them set apart or “specialized” for the performance of that function; but all that we can say of consciousness itself, in its *simplest form*, is this—that when certain impressions reach the vesicular neurine, which is the seat of consciousness, the mental principle experiences a change in its condition, viz., a feeling of pleasure or of pain. If it be pleasure, then the order of events in the organism which result from the reception of the impressions are in accordance with the order pre-arranged for the good of the organism; if it be pain, then the order of events excited are inimical to the organism. Concurrently with this feeling—coincidentally but not causally—there is a simultaneous action of the machinery, pre-arranged for the given end of either attaining what is good, or avoiding or repelling what is inimical.

It is not difficult to advance a stage further, and conceive another degree of consciousness; in this there is, in addition to the capability of feeling pleasure and pain, the perception that it is something external to the organism which induces the feeling—the notions of *outness* and *causation* in their simplest forms, and the foundation of the instinctive belief in the existence of an external world. This state implies the existence of a machinery for conveying impressions of external agents to the seat of consciousness, or, in other words, external senses. Still, there is neither Reason nor Will; the external agents may be desired or abhorred, according as they are excitants of pleasure or of pain, but the pre-determined arrangements in the ganglionic neurine are the source of all the *apparently* rational and voluntary *movements*.

The natural history of these pre-arranged affinities between the vesicular neurine of the periphery of the organisms and that of the central ganglia, constitutes a most important chapter in psychology. As to the intimate structure upon which they depend we know nothing further than this, that it is ultimately resolvable into cells; and the inference naturally resulting from this general fact is, that these affinities in the highest organized beings have their analogues in the

cell-affinities of the simplest forms. We also know that the vesicular neurine which receives the impressions on the periphery is as specially adapted to them as the central masses. This is particularly obvious in the special senses. Whatever be the arrangements, they are constantly and necessarily transmissible from parent to offspring, for it is from them that those instincts arise and are brought into action which constitute leading characteristics in the infinite variety of animal forms. And as instincts can be acquired, so also these molecular arrangements and their dependent affinities may be acquired, and being so acquired, may in their turn be transmitted. "I walked in the fields," the author of the "Psychological Inquiries" observes, with reference to these acquired instincts, "during the autumn, with a young pointer dog, which had never been in the fields before. He stopped, and pointed at a covey of partridges." The extent to which long dormant instincts may be excited, when the appropriate impressions are transmitted through the senses, is very remarkable. The proprietors of Wombwell's menagerie sell the straw which has been used for only a few hours by their animals, when they have done with it. Such straw, that had been used by the tigers and lions, was littered in a stable as bedding for some horses. So soon as the latter entered the stable, they exhibited the greatest alarm, pricking their ears, snorting, and smelling with the utmost caution at the straw. It was evident that they detected the scent of a natural enemy, of which neither they nor their progenitors for many past generations could have been practically cognisant. The minutest habitual acts show a similar law. "In talking of hand-writing" (Moore records a conversation at Lord Denman's) "and its being sometimes hereditary, Brougham said that he had found some of his grandfather's, which exactly resembled his own, though the grandfather had died before he was born, and his father's writing was altogether different."*

There is a fundamental relation or affinity between the conscious mind and the unconscious reason, which forms and operates through these molecular arrangements. It is this: what the latter *designs* is in definite relation to the former, psychologically. Thus, the *good* of the organism is designed; now, what is good gives pleasure, and is with pleasure automatically sought after; what is inimical gives pain, and is automatically repelled with abhorrence. Again, the unconscious reason acts wholly in reference to the *external* world; the first glimmer of the conscious mind is in reference to the external world. And this idea may be evolved to a very wide extent, and include all that *knowledge* of the external world (natural philosophy) which reaches

* Memoirs, &c. of Thomas Moore, Vol. VII., p. 66.

the consciousness through the intellect, for such knowledge is possessed and acted upon by the unconscious reason to a degree far transcending man's present powers. What he may ultimately know of these cannot be fixed; it is virtually illimitable. The laws of heat, light, and electricity, so commonly applied in living organisms, have of late years had a sufficiently wonderful development to warrant the most hopeful anticipations for the future. It is in the human cerebrum that these three elements of mind have their highest development. It is a fair inference, that the vesicular organization and the unconscious reason in man are endowed, potentially at least, with as perfect powers as they display in the working of the instincts of the lower animals; it is certain that the self-conscious mind which uses them as its instruments is much more perfect. It is also a fair inference, that much of the perfection of the human mind is due to the larger surface of vesicular neurine to which it is in relation. What goes on in this vast arrangement of cells during thought is certainly at present beyond our means of research; nevertheless, if we cannot unravel the intimate nature of these physical processes, we can indicate some of their relations in varying states of the mind.* There is a state of mind, *e. g.*, in which consciousness is suspended.

“CRITES.—You have compared death from mere old age to falling asleep, never to awaken again in this world. This brings us to another subject, not very distantly related to that which we have been just discussing; at least so thought the Latin poet when he wrote—‘*Quid et somnus, gelidæ nisi mortis imago?*’ What is sleep itself? Wherefore is it required? What is the condition of the nervous system on which it immediately depends? and what, during sleep, is the actual condition of the physical and mental faculties?”

One or two general facts are stated by our author, which are of fundamental importance in the solution of these problems. All the organic processes,—the action of the heart and of the respiratory muscles, digestion, nutrition, secretion, the generation of heat—go on unceasingly; no repose is needed. Instinctive acts—indeed, all those which spring from automatic action on a fixed molecular arrangement, as the flying of migratory birds, &c.—cause no fatigue.

“The muscles of the limbs may be for a long time in a state of involuntary contraction (as in cases of tetanus or catalepsy) without weariness being induced, but under the influence of the will they cannot remain contracted for more than a few minutes at a time. In like

* There are two admirable Essays on Consciousness, in Sir Henry Holland's Chapters on Mental Physiology. The one is entitled, “Mental Consciousness, in its Relation to Time and Succession;” the other, “On Time as an Element in Mental Functions.”

manner, visions may pass before the mind when it is entirely passive, without causing fatigue; but it is quite otherwise when we endeavour to arrest their progress, to view them under different aspects, and to compare them with each other. This occasions weariness, and makes us stand in need of repose, and at intervals of that complete repose which belongs to sleep, as much as voluntary muscular exertion; and these things justify the opinion, which I believe was first distinctly expressed by Dr. Darwin, that *the essential part of sleep is the suspension of volition.*"

What relations do these modes of action bear to the phenomena of insanity? The italics are our own in the paragraph just quoted; we have given emphasis to the doctrine that the essential part of sleep is the suspension of volition, because we have a deep conviction alike of its truth and that it has a direct bearing upon the relative condition of the cerebrum and the will in insanity.* But what is the will? We have seen that consciousness in its simplest form has reference to the ends designed by the unconscious mind; by parity of reasoning, the conscious will, in its simplest form as *instinctive* will, is the determination to do what the unconscious mind has designed. The perfect rational will acts from perfect *knowledge* of the ends and the means; it therefore requires sound functional activity in the organization, and a perfect co-ordination of all its parts to the end willed. The muscular system must be healthy, and in due relation to the motor part of the nervous system; the external senses must also receive impressions, and the organ of thought must duly work upon those impressions. But what happens in sound sleep? These requirements wholly fail. The muscular system (voluntary) is powerless; the motor portion of the nervous system responds either not at all or imperfectly to the will: the external senses are closed, or receive impressions imperfectly; and the organ of thought is the seat of an infinite series of changes, unconnected, uncontrolled by the will, which reach the consciousness in the forms of phantasies, illusions, dreams.

The causes of sleep are natural; that is to say, they are a part of the pre-arranged scheme of individual life. Thought implies a rest for the organ; where there is no thought—only automatic action—there is no pain nor sense of fatigue, and therefore no need of repose. The causes of insanity—of which imperfect sleep is the type—are unnatural. First and most common is work of the organ without sufficient repose. The first result of this is an inability to sleep; or, in

* The reader should especially consult Sir Henry Holland's most interesting chapter "On the Relations of Dreaming, Insanity, &c.," and the preceding one, "On Sleep," in his Chapters on Mental Physiology:—"If such phrase were permitted as a just theory of madness," Sir Henry remarks, "I know no principle so capable of affording it as that which views all the forms of insanity, including delirium, in their relation to corresponding healthy states of mind."

other words, the cerebrum continues morbidly active. The patient feels fatigued and weary, but think he must, and sleep he cannot. The following will be read with interest:—

“EUBULUS.—I have understood that this state of the system, when long continued, is sometimes the forerunner of mental derangement; and I can well understand it to be so. It is reasonable to suppose that the absence of its natural refreshment would powerfully affect the nervous system. Indeed, it happened to myself to be acquainted with a case of this kind. A gentleman of my acquaintance, in whose family circumstances had occurred which were to him a source of intense anxiety, passed six entire days and nights without sleep. At the end of this time he became affected with illusions of such a nature that it was necessary to place him in confinement. After some time, he recovered perfectly. He had never shown any signs of mental derangement before, nor had any one of his family, and he has never since been similarly affected. This was an extreme case; but do not examples of the want of sleep, producing very similar results, though in a very much less degree, occur under our observation constantly? How altered is the state of mind in any one of us after even two sleepless nights! Many a person who, under ordinary circumstances, is cheerful and unsuspecting, becomes not only irritable and peevish, but also labours under actual though transitory delusions; such, for example, as thinking that others neglect him, or affront him, who have not the smallest intention of doing either.

“ERGATES.—I have observed such effects as these repeatedly in nurses who have been harassed by an incessant attendance on sick persons during many successive days and nights; and this goes far towards explaining the origin of a vice to which individuals of this class too frequently become addicted. Alcohol removes the weary feeling and the inability of exertion which the want of sleep occasions. I have sometimes, when I have been writing late at night, and much fatigued, so that I could scarcely fix my attention on the thing before me, feeling as if my head were almost too large for the room to contain it, obtained complete relief by taking a single glass of wine.”

Now, let us apply these interesting views to the pathology of insanity. Over-work, anxiety, or other depressing emotions, impure or imperfect blood, structural or functional disease of the cerebral tissues, especially from alcoholic stimuli,—all, or any of these causes of disordered cerebral action, take effect permanently upon a brain predisposed either by its original constitution or an acquired condition, to fall into the state described as resulting from want of sleep. The state is permanent—is intensified—it is insanity. The “vice” of drunkenness is now “*oinomania*,” the irritable temper is “*maniacal anger*,” the transitory illusions as to neglect, injury, insult, are now predominant ideas, and the affections and sentiments are perverted. The affectionate mother or gentle daughter is changed into a demon-like character, exactly the opposite to her ordinary condition. In short, we have that which is

vice and crime in the healthy, appearing as "*moral insanity*" in the diseased.

The following case came under our own observation, and we can vouch for the accuracy of the details. A very worthy, pious, good man in humble life feeling indisposed, took a strong decoction of daffodils from a quack doctor. He vomited incessantly for many hours after, and then began to lose all control over his thoughts—his own expression. At the time of our visit he stated that he got no sleep, being delirious during the whole of each night; that he was extremely anxious about himself and his actions during his ravings; and in particular, that he feared that in spite of all his efforts at self-control he should be inflicting some serious, if not fatal, injury on his wife (to whom he is much attached), as during the paroxysm he feels so intense a hatred to her that he would like literally to devour her. He expressed the hope that his friends would place him in an asylum, as it was with the greatest difficulty he resisted the temptation which came into his mind to take his wife's life. We give this case as typical of a large class, which has been grouped under the term *moral insanity*, and with reference to the following remarks of our author.

"CRITES.—It leads to another subject, in which I feel a still greater interest, partly because, from the special nature of my pursuits, it is sometimes forced upon my attention, and partly because out of it arise questions which, as they affect our social system, are of great practical importance to us all. Some writers have described, under the name of *moral* or *instinctive insanity*, a state of mind in which they say that there are no illusions, nor any affection of the intellect, but in which there is simply a perversion of the moral sentiments; the individual labouring under an impulse to perform certain extravagant and outrageous acts injurious to himself or others, such impulse being irresistible; so that he is to be held as being no more responsible for his conduct than an ordinary lunatic. Now, I own that, looking at the question merely as one who has some knowledge of human nature, and with no other aid than that of my own common sense, I am very much inclined to doubt the correctness of this doctrine, and I am certain it is dangerous to admit the plea of irresponsibility for those who labour under this so-called *moral insanity*, to the extent to which Dr. Prichard and others have claimed it for them. Observe that I use the term *moral insanity* not as comprehending cases in which there is a belief in theories that do not exist in reality, or cases of idiocy, or those approaching to idiocy; but limiting it strictly and exclusively to the definition given by writers on the subject. The law makes a reasonable allowance for the subsiding of passion suddenly provoked; but we are not, therefore, to presume that the same allowance is to be made for those in whom a propensity to set fire to their neighbours' houses, or commit murder, is continued for months, or weeks, or even for hours. Is it true that such persons are really so regardless of the ill conse-

quences which may arise, so incapable of the fear of punishment, and so absolutely without the power of self-restraint, as they have been sometimes represented to be? If not, there is an end of their want of responsibility."

The author then refers to the state of the gouty patient, whose proverbial irritability is thought to be dependent upon the presence of lithic acid in the blood (though certainly bile therein is as frequent a cause), and asks whether the demonstrated presence of lithic acid ought to be admitted as an excuse for a severe bodily injury he might inflict on another in a paroxysm of ill-temper? He adds further:—

"It seems to me that juries have not unfrequently been misled by the refinements of medical witnesses, who, having adopted the theory of a purely moral insanity, ought not to be applied to at all. It is true, that the difference in the character of individuals may frequently be traced to difference in their organizations, and to different conditions as to bodily health; and that, therefore, one person has more, and another has less, difficulty in controlling his temper and regulating his conduct. But we have all our duties to perform, and one of the most important of these is, that we should strive against whatever evil tendency there may be in us, arising out of our physical constitution. Even if we admit (which I do not admit in reality) that the impulse which led Oxford to the commission of his crime was at the time irresistible, still the question remains whether, when the notion of it first haunted him, he might not have kept it under his control, and thus prevented himself from passing into that state of mind which was beyond his control afterwards. If I have been rightly informed, Oxford was himself of this opinion, as he said, when another attempt had been made to take away the life of the Queen, 'that if he himself had been hanged, this would not have happened.'"

Oxford's opinion is correct enough, no doubt, as regards *himself*, but it is hardly valid as a judgment on another.

The question of responsibility in cases of this kind is undoubtedly of vast importance, but it is also one of as vast difficulty, and only to be solved by a deep and accurate knowledge of mental physiology. We therefore do not concur in the opinion expressed by the author, "That it is a very great mistake to suppose that this is a question which can be determined only by medical practitioners; any one of plain common sense, who will give it due consideration, is competent to form an opinion on it; and it belongs fully as much to those whose office it is to administer the law, as it does to the medical profession." Common sense has erred fatally, from time immemorial, in determining the nature of all abnormal mental phenomena, for it is, in truth, only another name for popular ignorance.

We have seen that in sleep the action of the will is suspended. Now, common sense comes to our aid here, for it assures us that

in dreams the most absurd and impossible notions present to our minds all the reality and verisimilitude of truths. Fortunately, the motor system cannot respond to the vagaries of the self-acting cerebrum, otherwise man would be a mischievous lunatic for a third or fourth of each day.* In delirium and in furious mania such a hypothetical state is found, for the motor system responds to the uncontrolled cerebral activity. Common sense readily judges of this mental state, for it is as obviously as abnormal as the condition of the mind in dreams. In other forms of alleged insanity, the suspension of volition is not so obvious, and therefore as to these, the question of moral responsibility resolves itself into the extent to which the power of the will is suspended. Now, as that suspension is the result and the symptom of cerebral disease, it surely follows that the men experienced in the class of diseases which suspend or destroy the will, are the proper judges and exponents of the fact of its suspension or destruction by disease. When judges are thus experienced, medical testimony will not be needed to defend the unfortunate lunatic from death or prolonged punishment; but certainly, until the bar study mental philosophy, not metaphysically, but physiologically, there must be ever the conflict between medical testimony and "common sense," for it is simply the conflict of knowledge with ignorance.

All men conversant with the insane recognise this impulsive form of insanity. They see it in different individuals, in different degrees, and in different stages. They can watch day by day the struggle between the will and the morbid impulse; now they see the one victorious, now the other, as the cerebral disorder yields or predominates. Hardly a vice can be named that is not met with in practice amongst the insane or half-insane, as a morbid impulse. A most excellent friend of ours, a man of the highest moral and intellectual culture, was seized with an impulse (at church, of all places) to commit an unnatural crime. Nothing could be more abhorrent to his nature, and happily for him, his reason told him that such an impulse could only arise in a mind diseased. He therefore fled to us for refuge, for he knew well that if the cerebral disorder attained to such a height as at once to strengthen the foul impulse and enfeeble his will, he must irrecoverably fall a victim to it. The source of the morbid condition was traced to ascarides; with their destruction, the horrid fiend vanished.

Dr. Winslow has given an exposition of this subject in his third

* "Cicero says, and justly, that if it had been so ordered by nature that we should actually do in sleep all we dream, every man would have to be bound down before going to bed:—*‘Majores enim, quam ulli insan, efficerent motus somniantes.’*"—SIR HENRY HOLLAND.

"Lettsomian Lecture," published in the preceding number of the *PSYCHOLOGICAL JOURNAL*. He there repudiates alike the term "*moral insanity*" and the disease implied. It is an assumption, a "*petitio principii*," to say that in a so-called moral insanity, *when developed into acts*, there is freedom of the will, with the power to restrain impulses and combat illusions. We do not refer to the feigned forms, but to the true cerebral disorder. In the early stages of the affection, and up to a certain point, the will may be able,—and long after the will has been put in abeyance, the intellect may *appear* unclouded (it is these circumstances, indeed, which strike the attention of the inexperienced, and constitute the difficulty of rightly discriminating between crime and disease)—but often the mental powers are really more obscured than is apparent, and very often a *sudden* increase of the morbid cerebral activity as suddenly hurls the pilot from the helm. In the lecture referred to, the question is asked, "Is the 'moral maniac' capable of pursuing an ordinary and healthy process of induction, and competent to exercise the powers of reason, comparison, and reflection, *quoad* the specific features of his so-termed 'moral' disease? He may be apparently of sound understanding; able to solve with great rapidity a difficult mathematical problem; have great capacity for the ordinary business of life; may converse with ease upon points of science, art, and philosophy; and astonish the world by the tenacity of his memory, the vividness of his fancy, the playfulness of his satire, the brilliancy of his wit, and the majesty and sublimity of his eloquence—all these elevated states of mind are compatible with *latent delusive ideas and intellectual disorder*."*

Phrenology and the "science of human nature" are the main subjects of the sixth and last dialogue in the work before us. It opens thus:—

"The term which we had allotted for our visit was drawing to a close. On the day preceding that of our departure, after wandering for some time exposed to the rays of an August sun, we found ourselves enjoying the shelter of the beech wood, which I have already mentioned as being in the neighbourhood of our friend's habitation. A tree which had been lately felled afforded us a seat. The cool shade was refreshing to us after the glare and heat of the sunshine in the open country, and the stillness and silence which prevailed afforded us the opportunity of renewing our conversation on subjects connected with those which we had discussed previously."

Those engaged in active mental labour in the busy haunts of men, universally feel—at least for awhile—how delightful is the contrast of

* Third Lettsomian Lecture, by Forbes Winslow, M.D. *Journal of Psychological Medicine*, July, 1854, p. 429.

sylvan retirement with town life; and the wisest almost resolve, for the remainder of their days,—

“— *Sylvas inter reptare salubres
Curantem quicquid dignum sapiente bonoque est.*”

Such feelings are rarely, however, of long duration. The “social instinct” of the citizen would soon be as irresistible as hunger, and “*quicquid dignum sapiente bonoque*” would be the only means of rendering a retired life endurable. The study of human nature is the highest employment of the intellect—its instincts and higher faculties, its past history, its future destiny; “in short, the ‘science of human nature’ taken in its most extended sense. And in this sense,” adds the author, “it is a most extensive science indeed, including as it does anatomy and physiology; intellectual, moral, and political philosophy; ethnology, and I know not how much besides. Even the most abstract sciences, though not directly, are indirectly related to it, as we value them only in proportion as they tend to gratify the curiosity, supply the necessities, or elevate the character of man.” With this quotation we must conclude our notice of this interesting and charming volume.

ART. II.—ARTISTIC ANATOMY.*

ABOUT five-and-twenty years ago, Dr. Knox was in the zenith of his fame. He enjoyed, as an anatomist, an European reputation; and was one of the best and most expert Demonstrators attached to any British School of Medicine. His popularity in the north was unbounded. His practical knowledge of the organic structure of the dead body, as it lay stretched on the table before him, while he stood by like a necromancer about to perform some mystical operation; the graceful manner with which he addressed his class; the insinuating tone of voice and smile of fascination (such as artist never yet depicted); the flowery and poetic language with which he described the articulations of the vertebral column, the ligaments of the knee-joint, the anatomy of the axilla; above all the ineffable feeling of scepticism which seemed to thrill through his very scalpel as he unfolded the convolutions of the brain, laid bare its ventricles, and exposed even the *commissura mollis* to the wondering gaze of the most remote pupil in his gallery; impressed upon the mind the conviction, which has not since been disturbed, that if Kemble or Edmund Kean, whose wonderful

* A Manual of Artistic Anatomy, for the use of Sculptors, Painters, and Amateurs. By Robert Knox, M.D., F.R.S.E. London: Reusshaw. 1853.

Shakspearian impersonations—we have often watched with thrilling and breathless admiration, were great actors, so also was Knox in his own theatre in Surgeon's-square, the walls of which have resounded with applause as loud, as prolonged, and as enthusiastic as ever shook, or seemed to shake, the Theatre Royal Drury Lane to its foundation, in the most palmy days of dramatic art. Five-and-twenty years have since then passed!

“Eheu fugaces—Posthume—Posthume
Labuntur anni.”

The University of Jacobus Sextus—ever time-honoured and revered—has, during this *hiatus memorabilis*, lost many of the great lights which then ruled the day; and the school without, but still underneath the shade of the academic walls which Barclay, Gordon, the younger Cullen, Fletcher, Mackintosh, Milligan, adorned with their eminent talent and learning, has undergone we know not how many vicissitudes. There are, however, many bright constellations which still linger in the departing twilight of an age which will hereafter be esteemed memorable; and ever and anon a something crosses our path which brings back to our recollection scenes, incidents, persons, and associations, which abundantly verify the old prediction of Æneas; for they are indeed “pleasant to remember.”

Here is, to wit, a small octavo volume on “Artistic Anatomy,” by Dr. Knox, from which it would appear that, although his sun may be no longer traversing the ecliptic of the northern hemisphere, it has not yet set, but sheds even now its light upon the difficult and dreary path which the artist—whether sculptor or painter—is doomed to tread before he can reach the temple which he deifies! But we have spoken of Dr. Knox only as an anatomist. He has higher claims. His “Lectures on Comparative Anatomy” were conceived in a truly philosophic spirit, and were listened to with instruction and admiration by pupils who had attended the celebrated courses on the same subjects, by Cuvier, Lamarck, and Geoffroy St. Hilaire. His translations, too, of Icedemann, Meckel, and Cloquet's great work on “Descriptive Anatomy”—at a period when these illustrious authorities were little known in this country—conferred upon schools of Medicine, generally, invaluable service. In addition to which his various discoveries in Physiology, which he communicated from time to time to the Royal Society of Edinburgh, and published in desultory scientific journals, have given Dr. Knox a conspicuous and enviable position among the great and original thinkers of his age. There is a class of men so restless, from the prodigality of their powers of invention, that they cannot remain satisfied with the discovery of simple truths. There are, we verily believe, philosophers, who are so superabundantly ingenious,

so curiously and inexpressibly desirous of discovering new combinations in the phenomenal world, that they would turn Lord Rosse's telescope itself into a kaleidoscope, rather than survey in a straightforward manner through its gigantic lenses the naked majesty of the heavens, revealing amidst its clustering groups of stars the gaps, so finely described by Humboldt, which appear to open into the illimitable regions of space. It were an easy matter, one might have supposed, for so thorough and so accomplished an anatomist to have shown the relation which exists between the structure of the human body and its representation in the highest works of art, whether in sculpture or painting: but has he accomplished this in the manual before us? Does not Dr. Knox, at every step of his progress, throw in our way some semblance of a paradox—some seemingly incomprehensible proposition which startles us, and challenges contradiction? Before we have even crossed the threshold, in the first paragraph of his Introduction, he tells us that his object “is not merely to teach the artist how to draw or to sculpture the human frame correctly; he has a higher aim.” He then continues, and we beg to call attention to *our italics*:—

“The fine arts to which I limit my present view, sculpture and painting, *most unquestionably are not*, as M. Quatremère de Quincy seems to have thought, *merely imitative arts*; such an expression is inapplicable in every sense to the compositions of Michael Angelo, the *Cena of Da Vinci*; the *Cartoons of Raphael*, the *Apollo and Venus of antiquity*, and generally to the inimitable works of the unknown antique sculptors. The Parthenon was *not* the product of an *imitative* mind; no *mechanical-minded Saxon* could have imagined or designed Egyptian Thebes *Assured of the soundness of my views, I will yet go further; the rustic scenes of Teniers and Ostade, the landscapes of Cuyp, of Hobbima and Vanderfeld, the interiors of Gerard Dow, the compositions of Wouvermans, are no more imitations than the grand conceptions of Raphael, and are as much unlike their modern imitators as Astley's Theatre is to the Coliseum.*”

Here we may well pause, and ask what our learned anatomist really means? The highest conceptions of genius cannot transcend the sphere of our own consciousness. We can disintegrate or combine objects in any way we please; but can never create or imagine an object, the form of which is not already impressed upon the senses. All the heraldic anomalies emblazoned in the Herald's College, our griffons, our sphinxes, our centaurs, our unicorns, our double-headed eagles, what are they more than “combinations of disjointed things”? Proceed higher; what can the finest landscape of Claude, or Salvator Rosa, or the most sublime conception of Poussin, be more than nature herself portrayed under her most lovely, her wildest, or most sublime forms? The “Last Judgment” of Michael Angelo, on the

plafond of the Sistine Gallery, when analysed, presents to us clouds, figures, heads, which, in the midst of their majestic array, have their types in nature. Look at the "Last Supper," by Leonardo da Vinci; are not those apostles, sitting round the table of their Blessed Master, in figure, face, and gesture, in every sense human? Are not those hands laid upon the table designed after the very likeness and fashion of the hand as it should be studied by every painter who would faithfully delineate it? Or take the picture of "Our Lady of the Immaculate Conception," by Murillo, the purchase of which from Marshal Soult's collection lately excited such a fervour of contention in Paris. What have we here? A female figure, with "grave, sweet eyes and golden hair," and beautiful features, her hands crossed on her bosom as if in prayer. She is supported on clouds. From her head, as from a sun, radiate streams of light; under her feet are visible the horns of the crescent moon. Beneath the clouds is seen the outline of the globe, on the surface of which a serpent is gliding along. "To those conversant with the mysteries of religious art," says the eloquent artistic critic from whom we have taken this description,* "this picture has a meaning which the uninitiated cannot penetrate. The Virgin is here represented not only as 'Maria purissima sin pecado concebida,' but as the second Eve, whose seed was to bruise the head of the serpent. The painter has endowed her with the attributes of the Woman of the Apocalypse, 'clothed with the sun, having the moon under her feet, and on her head a crown of twelve stars.'" Now, there is not an image in this magnificent composition, with all its veiled, emblematical, and allegorical meaning, that is not borrowed from, and suggested by, imitative art. Still more unfortunate for Dr. Knox's paradox is his reference to the Dutch school of painting: the pictures of Teniers are literally a transcript of living nature; and for the interiors of Dow; a lady once observed to us, in the Louvre, when we were looking at the "Cottage Scene," where the family had assembled at a table, "You might see the threads of the very cloth!" Every artist knows—and indeed Dr. Knox would not have troubled himself to have written this artistic Manual himself if he also did not know—that Art is, and must ever be, strictly imitative, however genius may invest its productions with suggestive representations, and lights and shadows which carry the imagination beyond the dim confines of humanity.

We are next told by Dr. Knox, that "*no mechanical-minded Saxon could have imagined or designed Egyptian Thebes!*" and hereupon he throws at our feet this reproof: "*A taste for the Fine Arts, and of consequence the condition of these arts, is about as low in Britain as it can*

* Edinburgh Review, January, 1853.

well be." Again we pause, and would break a lance with this "learned Theban." What does Dr. Knox mean, not only in this Manual, but in his book on the "*Races of Men*," by disclaiming against what he is pleased to call the "Saxon race"? Who are they? Whence came they? If, as would appear from the context in different portions of his work, Dr. Knox levels these aspersions against the English, as a people, we inform him that his anthropology is at fault! It was very well for Daniel O'Connell and "the Agitators" of Ireland, as they styled themselves, during a period of great political commotion, to declaim against the "Saxon;" but this was adopted as a mere political war-cry, such as conflicting parties always have had recourse to during the excitement of great civil conflicts. The French of yore shouted "*Montjoye*;" the Normans, "*Dieu Aide*;" the Flemish, "*Arras*;" the Augeoines, "*Balie*;" the Bretons, "*Mallon*;" and why should not the Irish in the nineteenth century, in rousing the passions of their Celtic followers, cry out, "the Saxon"? But Dr. Knox is too good an ethnologist to recognise the existence really of any such race, which, according to his own non-transmission theory, must long ago have been as extinct as the Saxon Heptarchy itself! He must know, that the English people are now a-days no more "Saxons" than they are Danes or Normans. But apart from this, if Dr. Knox seriously entertains the opinion concerning Art which he has above expressed, does he not lay himself open to the question whether his information respecting the state of the Fine Arts in this country is sound? Did he never hear of Sir Joshua Reynolds, Morland, Wilkie, Turner, Haydon? If he will walk into Sir John Soane's Museum, in Lincoln's Inn-fields, some fine afternoon, he will there find the pictures of an insignificant personage named William Hogarth, who is supposed ("mechanical-minded Saxon" as he may have been) to have had *some* genius and feeling for his art! If still sceptical, we would invite him to accompany us to Hampton Court, and admire with us (if he have any taste or love for woman) the Beauties of the Court of Charles II. Here, however, as ladies are in the case, we might possibly, albeit the age of chivalry is gone, wax warm, and would in that case challenge him to repair with us to France, not for the purpose of measuring distances and drawing our rapiers, but for that of visiting the charming Palace of Versailles; and there, perambulating the polished floor of its long galleries, we would call upon him to select from the whole range of celebrated portraits, the idolized beauties of France, from the reign of Francis I. to that of Louis XV.; from the host of Vallières, Maintenons, De Pompadours, any pictures equal in artistic excellence to those of Sir Peter Lely and Sir Godfrey Kneller. We could pursue this subject much further if our space per-

mitted; but we cannot dismiss it without reminding Dr. Knox that we have artists now living among us of whose genius any nation might be proud—if genius were limited, which happily it is not, to climes and races. Indeed, we have the triumphant satisfaction of knowing that, so long as David Roberts, Lance,* Stanfield, Danby, Eastlake, Knight, Gordon, Grant, Maclise, Sir Edwin Landseer, Cooper, &c., &c., contribute their annual offerings at the shrine of British Art, our own Royal Academy will every successive year give a flat contradiction to the reckless assertion of Dr. Knox, that the state of the Fine Arts is as low in this country as it can be. Our only astonishment is, that any author attempting to write a Manual for the guidance of the English student in sculpture and painting should so grievously commit himself; but as we proceed, kicking out of our way paradox after paradox which some evil genius must surely have scattered on the path of Dr. Knox, we stumble upon one which our footsteps refuse to pass without some special mark of indignation! What shall we do with it? How handle it? Where throw it? How crush it? We walk round it, like a traveller who meets with some curious monstrosity in the highway, almost afraid to touch it lest it sting him. Surely we were mistaken. We read it again. No! Our vision did *not* deceive us. Here is the very passage:—“Experience,” says Dr. Knox—Mark! gentle reader! for we believe fair eyes do sometimes glance over our pages—“Experience had told me *that woman’s mind had no real sympathies with the Fine Arts (!)—that she does not understand their meaning or their object (!) Nature’s landscape itself, whether spread out before her or represented on canvas, she passes heedlessly by (!!) Her mind is a matter-of-fact mind—delicate, tender, soft; but clear, observing of detail, devoted to the real. To her, next to herself, man is all! Fashion obeys; she commands and creates it—jewels, rich garments, tapestry, gorgeous carpets, display!”* Fie! fie! Dr. Knox. Is it thus you speak of the sex whom you are known so much to idolize, and who, if report speaks truly, you are capable of so greatly fascinating by the sauvity of your manner and the charms of your conversation? We will empanel a jury of ladies to try the question of libel. Were we to do so, we suspect they would pronounce a summary verdict, and that the learned Doctor, before being dismissed from behind the bar, would have to

* In Haydon’s “Autobiography,” reviewed in a previous number of this Journal, the following entry occurs in his diary: “*I have educated two great artists—Lance and Eastlake.*” Why, we ask, is not this “great” and inimitable artist a Royal Academician, or even an Associate? George Lance is unquestionably unrivalled in this, and we believe in every other country, in his own specialté, and is certainly entitled to have honorary distinction conferred upon him. Apart from his extraordinary artistic talent, he possesses many intellectual, amiable, and estimable moral and social qualities. His admission into the Royal Academy would not only reflect a lustre upon that distinguished body, but give general satisfaction to all admirers of genius and true lovers of British Art.

kneel, and according to an old but not obsolete custom, "sue the mercy of the court."

As we set out with stating, so we repeat, that Dr. Knox is an excellent anatomist, an accomplished physiologist. The anatomical descriptions contained in the work before us are deserving every praise—clear, concise, and graphic. They will be useful to the young artist, who must commence with the study of anatomy, and who should remember that when Michel Angelo wished to begin a statue he made first a paper on the skeleton, afterwards upon another paper the same figure clothed with muscles; in this way he executed the statues of Christ, in the Church of Minerva, at Rome, many of which studies were long preserved. So also Goethe remarked, that "The human form cannot be comprehended merely through seeing its surface; it must be stripped of its muscles, its parts separated, its joints observed, its divisions marked; its action and counter-action, the hidden, the reposing, the foundation of the apparent, searched, if one would really see and imitate what moves as a beautiful inseparable whole in living waves before the eye." Let the young artist treasure up these observations; and whatever taste, or talents, or even genius he may possess, or fancy himself to be endowed with, let him endeavour to acquire a thorough knowledge of the fundamental principles upon which he must work out his conceptions. If the marble from its shapeless block is to be chiselled into a symmetrical, graceful, almost breathing statue, such as might, like the fabled Pygmalion, descend from her enchanted pedestal;—if the blank and naked canvas is to be made to glow with a living picture, the visible impression of all that can be imagined beautiful in earth or sublime in Heaven!—the master-hand that brings into palpable existence such wondrous conceptions must know even mechanically how to deal with the details! There is no Promethean spark lying hidden in the unmodelled clay, waiting to leap into life at the sculptor's touch; there is no magic power, concealed charm-like, in the palette upon which the poor artist must make up and blend his colours, which are of themselves of "the earth earthy;" he must toil, toil, toil. No men ever laboured harder in their vocation than the great artists of antiquity! Talk, indeed, of the mechanical-minded Saxon!—declaim idly and untruly against the present state of British Art,—how can such mistaken views assist the young artist industriously plodding at his easel? It is an old saying, that, "there is no royal road to geometry;" nor can Genius itself, without patient study, master the difficulties which lie at the threshold of every science. Let the student, therefore, persevere. He may rest assured that the deeper the foundations of knowledge, the more secure and perfect will be its superstructure. Let him, therefore, be guided by the practical anatomical details in the Manual before us, which he will find really valuable

to him, and not pursue apocryphal opinions which evince more ingenuity than judgment. We have seen, during the last half century, many stars in the ascendant—not a few of which have set; but the brightest, the most refulgent and enduring of any have been those which in the morning of life have risen slowly and steadily.

ART. III.—THE CORRELATION OF PSYCHOLOGY AND PHYSIOLOGY.

DR. NOBLE treats very concisely of weighty matters in the three Lectures which he has reprinted from the *Association Medical Journal*.* The first is a summary of the Anatomy and Physiology of the Nervous System; the second considers “Emotional Sensibility and its Reactions;” the third, of “Ideas and their Dynamic Influence.”

From the remotest periods of physiological speculation, the brain and nervous system, as Dr. Noble remarks, have been supposed to have some special connexion with the manifestations of conscious life. Hippocrates, in his treatise, “*De Morbo Sacro*,” refers insanity as well as epilepsy to the brain; and to that extent his pathology is sound. He remarks, after referring epilepsy to the brain, “And by the same organ we become mad and delirious, and fears and terrors assail us, some by night and some by day, and dreams and untimely wanderings, and cares that are not suitable, and ignorance of present circumstances, desuetude and unskillfulness. All these things we endure from the brain, when it is not healthy, * * * and we become mad from humidity.”* There are passages in the Roman writers which prove that then, as now, the brain was proverbially considered to be the seat of insanity. A quotation from Horace will show this:—

“Si male rem gerere insani est; contra, bene sani:
Putidius multò cerebrum est (mihi crede) Perilli
Dictantis, quod tu nunquam rescribere possis.”

The Hippocratic theory of insanity is, in fact, condensed in the single word “putidius.”

Modern research has given greater clearness to cerebral anatomy and physiology by researches conducted in the spirit of the inductive philosophy. It is now generally acknowledged that the nervous system is made up of two distinct portions—the one called the white matter, the elementary fibrils of which *conduct* the dynamical influence derived from the other, termed *grey*, or, more correctly, vesicular neurine. The latter is in the centres of the nervous system and in the peri-

* Three Lectures on the Correlation of Psychology and Physiology. By Daniel Noble, M.D., Visiting Physician to the Clifton Hall Retreat, near Manchester. Pamphlet, pp. 45. 1854.

† Dr. Adam's translation for the Sydenham Society, p. 555.

phery of the body, whether we include in that term the cutaneous, mucous, serous, or muscular tissues. Between these are the afferent and efferent nerves, or, as Unzer denominated them, the to-and-fro carrying nerves. A *suitable* impression acting upon the vesicular neurine distributed on the cutaneous or mucous surfaces, induces a continuous change upwards in the *ad-ferent* (the to-carrying) nerve fibrils; and this change acting in a pre-ordained way upon the central vesicular neurine—still as an impression—induces a change in the *ef-ferent* (the fro-carrying) nerve fibrils, which reaching to muscular or secretory tissues, excites motions or secretions adapted to the wants of the organism. The motions thus induced have been termed *reflex*, *excitomotory*, and *automatic*. “The purpose of the spinal axis and its reflex function would appear to be the conservation of the organism, through excitation of the respiratory acts, by its governance of the various orifices of ingress and egress, and by its contribution to the integrity of some other processes in which reflex movements participate.” We quote Dr. Noble. With regard to the sympathetic system, he remarks, “It most likely communicates a susceptibility to certain motions involved in the processes of circulation, nutrition, and secretion; an influence not needed for their simple accomplishment, but required in the animal economy, in order that they may become related with, and in a measure subordinated to, the higher operations of the brain and nervous system.” Dr. Noble has followed Dr. Hall in stating the functions of the spinal cord, or “true spinal system.” We think, *mutatis mutandis*, that he would have found a better guide in Unzer—certainly one more systematic, clear, and philosophical. That author, we are satisfied, has not been *studied* (perhaps not read even) by modern neurologists, otherwise errors would have been avoided which Unzer has most clearly indicated. The nerves of *special* sense, as they are termed, that is to say, those through which man is enabled to take cognisance of the qualities and characteristics of external objects—smell, taste, hearing, sight, touch—are generally considered, as a matter of course, to be in constant relation to consciousness. Now, it is probable that without them consciousness cannot exist; but the converse is less probable, that they cannot be present and there not be consciousness. Unzer amply shows that external impressions will excite what appear to be volitional actions, but which are really “nerve actions”—the results of the operation of the *vis nervosa*, or, in modern phrase, reflex acts. They are excited (as he demonstrates by experiments), whether the animal feels them or not, and independently of any reference to the gratification of any desire or instinct. “The phenomena manifested by newly-born and decapitated animals, some of which have been already stated, amply prove that such apparently

volitional acts may take place, under circumstances which altogether exclude the idea of mind. What in them appears to be volitional, only *appears* so, because we draw conclusions as to other animals from the nature and working of our own minds. What appears to be designed, arises from the pre-ordination of nature, and in no case enters into the minds of even sentient animals.”*

These remarks are more especially applicable to the fifth sense, namely, “common sensation,” in which Dr. Noble includes *touch*, and which has its proper nerves and its “grey vesicular centres—the ganglia of common sensation.” Dr. Noble observes as to the latter—

“Physiologists are not agreed as to the identity of these structures; they must be expected, however, like the other sensory ganglia, to be somewhere at the base of the cranium; and I am myself disposed to think that the vesicular nuclei within the lateral lobes of the cerebellum constitute the encephalic centres of common sensation. Many years ago, Foville assigned this function to the aggregate cerebellum; and others with great plausibility have advocated the same notion. The anatomical connexion which exists between the ganglionic structures in question and the posterior columns of the spinal cord, through the corpora restiformia, favours the idea which I have advanced; and there are various physiological and pathological facts which go to corroborate it.”

The experiments of Magendie and Lugol are quoted as showing that the slightest touch of the fibres of the restiform bodies induces violent pain. A case related by Hutin “in which the sense of touch was so exalted that, upon the least contact, intolerable pain and restlessness ensued, with corresponding muscular contractions, resembling those produced by an electric discharge;” and in which, after death, among other changes, atrophy of the cerebellum was found, is also noticed. Dr. Noble further thinks that this view is reconcilable in some degree with the phrenological doctrine as to the sexual relations of the cerebellum, and with that which appropriates to it the function of co-ordinating the various muscles into their infinitely varied combinations. Dr. Noble’s hypothesis has the merit of ingenuity; we need hardly say that he does not esteem it, nor advance it, as more than an hypothesis.

All these sensory ganglia have a close relation with the muscular system, as well as with the consciousness. Dr. Noble remarks:—

“It would seem that impressions received in some particular ganglionic structure may be diffused through a whole chain of connected ganglia, and so bring about respondent movements of very varied character. These Dr. Carpenter designates *con-sensual*, not in the meaning of consentaneousness, but as occurring *with*, in dependence upon, *sense*.

* * * An odious taste simply may determine the involuntary act

* Dr. Laycock’s translation for the Sydenham Society, p. 323.

of vomiting; a loud and unexpected sound will occasion slight but very general contraction of the muscles, as in startling; the eye, when dazzled, is rapidly withdrawn from the light; and a sudden dash of cold water provokes deep inspiration and audible sobbing. These muscular actions are reflex as to their modes of occurrence; but they differ from the reflex actions purely spinal in being essentially attended with consciousness; and they differ from ordinary movements in the circumstance that neither volitions, nor ideas, nor mental emotion, properly speaking, are concerned in their production."

We are of opinion that sensation or consciousness are not *necessarily* connected with these movements, so accurately and lucidly described by Dr. Noble, and therefore are not "dependent upon sense." Mere consciousness is a passive recipient state of the mind, and cannot excite muscular action; nor can that form of it termed sensation; it is the *will* which is the moving power mentally—the functional activity of the cerebro-spinal centres corporeally. It is already granted that the spinal cord on the one hand, and the hemispherical ganglia on the other, may be functionally active, independently of consciousness or sensation; and we cannot understand why the sensorial ganglia, as they are termed, should form an exception to that *grand common law of ALL organized matter*, whether it be animal or vegetable—namely, automatic unconscious, but admirably adapted, vital action on the reception of an appropriate stimulus. A study of the metaphysics (if we may be permitted the phrase) of *cell* life, whether animal or vegetable, will reveal *quasi* mental processes quite as definite as those carried on by the cells of the vesicular neurine, whether they constitute the spinal, sensorial, or hemispherical ganglia. The latter are nothing but organized matter, like the former, and have functions generically the same. The laws of functional activity of the one are applicable to the other. All may be active without consciousness or the co-operation of percipient mind. To this great and comprehensive conclusion (we are satisfied) neurologists and metaphysicians must ultimately come.

The second Lecture, "On Emotional Sensibility and its Reactions," is particularly interesting. Dr. Noble shall state his views in his own words:—

"There is a sensibility more elevated in the psychical scale than either external sensation or the physical appetites; I refer to that all-pervading sense of bodily existence which the German psychologists have named *Gefühl*—general feeling, and sometimes self-feeling (*Selbstgefühl*). This sensibility connects itself, apparently, with the peripheral termination of nerves throughout the whole body, but more particularly of those supplying the thoracic and abdominal viscera. It would seem to localize itself in an especial manner about the præcordial region. It will best be indicated psychologically by use of the popular phraseology, *the spirits*. Under ordinary circumstances, this sense-

consciousness, is that of bodily contentment—tranquil spirits. When it is exalted, we are said to be in high spirits, glad at heart, joyous. * * * When it is depressed, low spirits are experienced; we are heavy and dull, and inapt for exertion. Acutely felt, it is *emotion*. These several states of the animal spirits, so designated, may result from purely physical causes, and in their origin be quite irrespective of thought."

Certain conditions of the viscera and atmospheric changes are well known for their influence on "the spirits." Morbid conditions of the blood, and of the nervous system itself, are also in the first class of physical agents. Dr. Noble very clearly distinguishes between this feeling of the state of the organism and common sensibility, in the perception of pain or pleasure through the *nerves*. It is an "emotive sense," with a suitable *habitat* in the encephalon. Dr. Noble differs from Dr. Carpenter as to the seat of this, as well as of common sensation. We have seen that he places the latter in the inferior ganglia of the cerebellum. Dr. Carpenter indicates the optic thalami connecting the corpora striata with it as the seat of the respondent movements. These, Dr. Noble thinks, "form the special region of emotional sensibility," adducing in proof arguments drawn from comparative anatomy, experimental vivisections, and pathological anatomy. "Certain nations," he adds, "are characterized more than others by emotional sensibility; the Irish, for example, more than the Scotch. Women are, in this respect, more remarkable than men. It would be interesting to compare the relative development of the optic thalami and corpora striata in the respective instances." Emotional sensibility, he thinks, induces its own reactions upon the muscular system, independently of the movements denominated con-sensual.

The third Lecture, "On Ideas and their Dynamic Influences," is the most important of the three. The automatic action of the cerebrum—its reflex function—is first illustrated.

"From the dominance of particular ideas, movements very often become excited when neither sensation nor emotion exerts any very appreciable influence, and when volition apparently exerts none at all. The movements in question seem to be quite as automatic—*reflex*, as it were—as those which spring from impressions made upon the spinal, sensory, or emotive ganglia. In the transition state between sleeping and waking, there is great fertility of incongruous thought—disorderly groups of ideas, receiving no governance whatever from the will; yet, in these circumstances, muscular movements and other phenomena will frequently take place, respondent purely to the dominant idea. An attractive object is before the imagination, and a snatch is made at it. Here there is no selection among motives—no will; the act is altogether impulsive, prompted by the simple idea. In certain irregular kinds of sleep, and in somnambulism spontaneously arising or induced

by artificial processes, the mind can at times be literally *played upon*, so as to educe actions and movements contrived beforehand; these being suggested by communication of the correspondent idea, which becomes reflected in the outer conduct. Mr. Braid, in his hypnotic demonstrations, exhibits these phenomena in a very remarkable manner."

Dr. Noble adds (after detailing instances), that the phenomena constitute illustrations of Dr. Laycock's doctrine of the reflex functions of the brain. They have been termed by Dr. Carpenter (who, in the 4th edition of his very valuable "Elements of Human Physiology," has given great clearness and development to the automatic and unconscious activity of the cerebrum), *ideo-motor*; Dr. Noble prefers the term *ideo-dynamic*, as being more appropriate, and applicable to a wider range of phenomena. It may be doubted whether these phrases render the subject clearer. In his original Memoir,* Dr. Laycock endeavoured rather to demonstrate the relations to *quasi*-mental acts of changes in the brain itself, and not to states of consciousness particularly. The nature and order of occurrence of these changes in the organ of mind is the great unsolved problem of mental philosophy, and his object was to separate those which are not *necessarily* accompanied by consciousness, from those which are. He based his views on the anatomical and functional analogies that may be traced between the encephalic and spinal ganglia. Now, as in the posterior and anterior grey matter of the latter there is found a sensorial and a motor element, so he considered a sensorial and motor element (also constituted of vesicular neurine and conducting fibrils) to be present in the encephalic ganglia; and as in the spinal ganglia there is a play of vital affinities producing incident excitor and reflex motor phenomena, independently of consciousness, so in the encephalic there is a similar play of affinities. Dr. Noble quotes the following from Dr. Laycock's Memoir to illustrate his argument:—

"In this manner Dr. Laycock discusses the hydrophobic gasp, and after speaking of its induction by attempts to drink, traces the influence of mere idea in bringing about a like result. 'The cerebral nerves,' says he, 'being analogous to the posterior spinal nerves, and the encephalic ganglia analogous to the spinal ganglia, the spectrum of the cup of water will traverse the optic nerves, and enter the analogue of the posterior grey matter in the brain, causing changes (*ideagenous* changes) corresponding to the idea of water; thence the series of excited changes will pass over to the analogue of the anterior grey matter, exciting another series (*kinetic* changes) by which the necessary groups of muscles are combined in action.' The whole subject has also been

* On the Reflex Function of the Brain. British and Foreign Medical Review, Vol. XIX., January, 1845

admirably elucidated by Dr. Carpenter, in the last edition of his '*Human Physiology*.' "

Now, Dr. Noble has evidently not fully comprehended Dr. Laycock's views—misled, probably, by the phraseology necessarily used. We shall therefore help to a clearer apprehension by pointing out that in the above extract the *immediate* antecedent to the hydrophobic gasp is not the *idea* of water (for that implies consciousness), but the "*ideagenous*" and "*kinetic*" *changes* in the cerebrum—the changes by which ideas are *presented* to the consciousness, but not necessarily reaching it. It is these—the analogues of those incipient excitatory changes in the spinal ganglia that induce acknowledged spinal reflex acts—which induce the cerebral reflex acts. The great object of Dr. Laycock's paper is to show that the cerebrum can and will act as automatically as the spinal cord, as independently of consciousness, as designedly, adaptively, and conservatively; and that even when consciousness is induced, whether in sensation or in thought, still it is not the will or sensation which is the principal agent of movement, but the *material changes* in the vesicular neurine or grey matter. The sensation or thought induced under these circumstances is only an *accompanying* and co-existing *result*, and not a necessary *antecedent*, or in the relation to the movements of a cause. He therefore argued that all these functions of the cerebrum could be, and often are, carried on unconsciously, and consequently occur in absolute independence of the will. Whether they be right or wrong, these are his views; so that the phrase, reflex function of the brain (which has reference to cerebral anatomy and physiology), is convertible into that of unconscious action of the brain, in reference to mental philosophy.

Nor did Dr. Laycock confine his doctrines to the nervous system of the *vertebrata*, for he argued, in this same Memoir, "That the structure and functions of the nervous system, in *all* animals, are subject to the same laws of development and action;* and, in accordance with this view, devoted a paragraph to a consideration of the histological or molecular relations of the nervous system to the *instinctive*, *emotional*, and *volitional* actions.† He went even further, for in expressing his conviction that the laws of action of the agent and reagent in vital phenomena would be found as definite as those operating on chemical phenomena, could a sufficiently minute analysis and induction be effected, he extended his views to the phenomena of *vegetable* instincts. In a previous publication, Dr. Laycock had drawn the inference that "no bio-molecular movements take place, even in animals of the highest organization, which have not their counterpart in vegetables and in

* *Op. cit.* p. 298.

† *Ibid.* p. 303 seq. "III.—The Substrata of Physical Phenomena."

animals of the lowest forms;”* and after a rapid review of vital and *quasi*-mental phenomena, as presented in series in vegetable and the ascending scale of animal organisms, remarked, that “the mode of action of the brain itself, as the organ of mind, may in some degree be ascertained by a microscopic analysis of the series of phenomena reviewed.”†

Subsequently when, in a correspondence with the late Professor Reid and Mr. Combe, Dr. Laycock had to explain and defend his views as to cerebral action, he again called attention to these leading points, and thus announced the grand principle by which cerebral physiology and pathology can alone be successfully elucidated:—“*The development, conservation, and reproduction of all organisms are regulated by an unerring law of design—a law as generally applicable to living matter as the law of gravity to universal matter.*” This law must be our guide in ascertaining the relations of the reflex, instinctive, emotional, and voluntary movements.”‡ Other passages of similar import might be added, but these will suffice to show the true nature of Dr. Laycock’s views.

Dr. Noble gives some interesting illustrations of the influence which peculiar ideas and trains of thought exert under circumstances in which volitional agency is imperfect or altogether in abeyance, as in insanity. Those are especially curious in which the cerebral changes thus induced influence the *sympathetic* system, as showing a closer and deeper connexion between the two systems than has yet been generally allowed. Dr. Noble was consulted by a patient who suffered from sleepless nights, and in the exercise of his discretion he prescribed a *purgative*, consisting of eight grains of compound extract of colocynth and two of calomel, to be taken at bedtime. The patient so took the purge, believing it to be hypnotic; and as a result, instead of being purged, “slept beautifully!” Dr. Noble justly observes, that instances of imaginary remedies producing the expected effect are common enough, but here was the action of a powerful medicine altogether altered. According to Dr. Laycock’s views, the following would be an analogous instance of action in the sympathetic in one of the *Articulata*. The *cunning* of the spider tribe in the pursuit of prey and escape from danger is well known to naturalists. “A garden-house had been plastered with very white lime, and having a large window, was unusually light. In a short time some spiders of a common kind took possession of the corners of the ceiling, there being no holes or cavities in which they could hide themselves. They soon became as *white as the wall*, but very certainly not from the lime adhering to them.”§ It is one of

* Treatise on the Nervous Diseases of Women, p. 93.

† Ibid. p. 36.

‡ The *Lancet*, Vol. II. 1845, p. 256.

§ The *Naturalist*, August, 1854, p. 167.

the tricks of fence of these animals to conceal or render themselves as invisible as possible; indeed, in the next page of the magazine from which we have taken this fact, another is stated, of the large diadem spider rendering himself invisible by giving to himself and his web a rapid vibratory motion. We have therefore an instance in which the colour of the skin was adaptively changed by the predominant idea of the animal's instinct.

Dr. Noble, in this Lecture, discusses the physiology of the emotions in a very able and interesting manner; his remarks on the nature of the will and of consciousness are also clear and good. Indeed, as to all the three Lectures, we only do a simple act of justice in expressing a very favourable opinion; and we have the greater pleasure in doing this because, on a former occasion, we thought it right to criticise a work by Dr. Noble somewhat sharply. We do not pretend to be infallible; we may have been too severe in our judgments, but this we can say, that whatever may be the merits or demerits of his "Elements of Psychological Medicine"—and of those the public will judge, however critics may criticise—these Lectures indicate a decided improvement—more reading, maturer thought, clearer conceptions.

We observe that Dr. Noble has carefully read the excellent work of Crichton on "Mental Derangement." He will doubtless regret to find on a careful perusal of Unzer's "Physiology," that some of Crichton's principal merits are due to unacknowledged plagiarisms from the latter admirable treatise.

ART. IV.—SYMPTOMATOLOGY OF INSANITY.*

THE Lectures, of which we propose to lay before our readers a brief analysis, were delivered by M. Falret, at the *Salpêtrière*. They were not originally intended for publication. Having, however, been reported in the *Gazette Médicale*, the author has, at the request of his pupils, consented to their separate publication. The author's far-spread reputation affords a strong presumption that the request was not made without good grounds. Our perusal of the volume has confirmed that opinion; and we would add, that by yielding to a reasonable solicitation, M. Falret has conceded a valuable contribution to the science of mental maladies.

The volume before us constitutes the first part of a series, and treats

* *Leçons Cliniques de Médecine Mentale*. Par M. Falret. 8vo, pp. 270. Paris. 1854. Première partie. Symptomatologie Générale.

of the *general symptomatology* of insanity ; comprising lesions of sensation and propensities ; of disorders of the intellect ; of illusions and hallucinations ; of derangements of the emotions and organic functions ; with a general view of the course of insanity — *i. e.*, the successive evolution of its different phases.

These Lectures are preceded by an Introductory Discourse upon the general principles to be followed in the study of mental disorders. Four principal modes of observation, the author remarks, have been followed by those who, witnessing all the varieties of insanity, have learnt that there is no passion, no idea, which can arise in the human mind, which is not represented in a lunatic asylum. The difficulty of introducing the order and regularity of a scientific classification among elements so discordant as the multiplied and varied phenomena thus presented, has been made apparent by the marked differences in the mode of observation followed by different classes of observers. These are classed by the author under four principal groups—*e. g.*, those of the romancers, the narrators, the somatists, and the psychologists. The first were guided in their selection of phenomena by their singularity and *bizarre*rie, substituting pre-conceived ideas for exact observation of nature, fiction for reality. This is the mode followed in the infancy of art, when observation is abandoned to all the caprices of imagination and ill-directed curiosity. By the second mode, that of the narrators, or the merely descriptive, leaving the impulses of mere curiosity, a great step is taken in the way of true science, following the laws of induction, ascending from the particular to the general fact. This mode, which has prevailed until recently, has rendered, and will continue to render, great service to science. In searching for still greater perfection in the observation of the phenomena of insanity, two other directly contrary directions have been followed ;—the somatic or physical, and the psychological. The somatic sees in all mental derangement a cerebral disorder, the symptoms of maladies various in their seat and nature : thus the incoherence of mania has been regarded and treated as identical with the delirium of fevers and other organic diseases. The psychologists, on the other hand, have too exclusively directed their attention to psychical phenomena, and have almost entirely neglected the physical conditions of organs :—thus, for instance, some regard insanity as consisting in lesions of attention, others as originating in moral causes. The regarding mental diseases too exclusively in either of these points of view, leads to artificial conclusions at variance with the actual phenomena presented in insanity. Thus very similar phenomena may originate in very different cause ;—melancholy may proceed from stupidity, or from pre-occupation by some painful idea. The essential differences of mental dis-

orders cannot be detected in any classification formed upon external and more obvious manifestations, the internal and less apparent conditions out of which they arise not having been duly studied.

In order to discover the tendencies, feelings, and dispositions which give rise to the manifestations of insanity, we must not be content merely to record the expressions and actions of the insane, as these individuals learn to conceal to a great extent their real mental condition. The first principle to be borne in mind, therefore, in the observation of the insane, is to change the part of the passive observer of phenomena into the active suggester of the manifestations of the fundamental condition. The second principle is to study the character of the individual patient, in order to distinguish the features he may present from those which are common to others. A third principle is never to separate a fact from the condition out of which it arises from the circumstances which precede or follow its occurrence. The physician who neglects the last principle resembles the historian who relates an historical event without investigating the causes which have prepared its way, and the circumstances of the epoch which may have modified or given it birth. A fourth principle, enjoined by M. Falret, consists in the establishment of *negative facts*, the discovery of the absence of conditions necessary to the sound mind, and by the observation of which the existence of insanity makes itself manifest more by the variance of the conduct of the insane, in ordinary natures from those around them, rather than by their actual expressions.

In his second Lecture, M. Falret commences the more exact and immediate objects of his course—the symptomatology of mental diseases—by the consideration of derangements of sensibility and propensities in the insane. These the author presents in a twofold point of view—viz., their general and their special pathology, thereby having due regard to the laws of analogy, by collecting phenomena of a similar character, and the laws of difference, by describing the distinct characters of the separate facts. This method presents the difficulty of deciding whether a particular fact should find its place in a general or a special description; while it offers, also, the advantage that in a doubtful instance the case can be referred to general pathology, which should include all facts common to every species of insanity.

The author exposes the error, which he says is generally committed, of regarding lesions of sensibility, sentiment, propensity, &c., as isolated lesions; describing them as distinct affections, whereas they result from combined derangement of several faculties. Some writers, M. Falret remarks, have described insanity in the same way that the romancers have described the normal state. Thus, the history of a passion has become the history of a disease. They have depicted the religious,

erotic, ambitious, homicidal, incendiary insane. Under this conviction, that the entire malady in its origin and its consequences is based upon an alteration of some one feeling or propensity, they have announced as distinct forms of monomania—*e.g.*, erotomania, demonomania, theomania, kleptomania, &c. In examining this doctrine, the author, in support of his views selects the sentiments of religion and of love, and the propensities to murder and to steal. When the words and acts of the insane religious mystic are closely examined, it will not be found that these proceed exclusively from an exaltation of religious principle, but are clearly referable to several different causes of a moral and intellectual order. Among these may be named pride and fear. The religious insane exhibiting temerity and audacity, believing themselves divinely inspired, are not simply content to make a few converts to their notions, but they would bring the whole world under the empire of their pride. Religion is but one of the manifestations of their sovereign pretensions; their words and their acts, properly interpreted, leave not the least doubt on this point, that these are far from exhibiting exalted religious feelings.

In a similar manner in the insane, who believe themselves to be the victims of the wrath of Heaven, damned, and devoted to the infernal powers, the fear of hell is but the expression of the general sentiment of fear. They think they perceive throughout the moral, and in the physical, world, all the evidences of ruin to themselves, and to their families and friends. What has been said with regard to religious insanity applies, the author observes, with more force to the passion of love. The erotic paroxysm is but a slight and passing ecstacy of an ideal love, with or without an object. The erotic form of insanity is very commonly associated with that of a religious character.

The requirements of legal medicine, M. Falret points out, have led to the attaching an undue importance to these propensities in regarding murder, suicide, theft, &c., as merely resulting from altered natural instincts, forgetting that either of these acts may proceed from very different sources. Some insane persons will commit murder to rid themselves of imaginary enemies, others to escape the power of some internal anxiety by which they are devoured; others will murder their children to send them to heaven. Other indications of insanity are also present in these cases. As in the healthy state, no faculty exists in an isolated state, so in the diseased condition the various faculties cannot be separated from each other.

Two forms of disordered sensibility are recognised by the author;—the state of depression and the state of exaltation. *Insanity without delirium does not exist*; that is to say, without any disturbance of the intellectual faculties. [M. Falret observes, that insanity manifests itself

variously, and that aberrations of sentiment are not less frequently met with than aberrations of ideas. Purely intellectual exertions induce a state of activity and tension not without their influence upon the state of sensibility; but these act rather as predisposing than as exciting causes of mental derangement, which is most frequently first perceived in disorders of the propensities or affections, as exhibited in aversion to those previously most warmly regarded. There is, in fact, an excess of susceptibility, inducing a want of harmony between the internal state and the world without; hence suspicion, defiance, melancholy, suicides, &c. These depressed conditions approximate to healthy states in which the mind is depressed, or under the influence of irritation, anger, sadness, &c. The opposite state of exalted sensibility has also its analogy in healthy conditions of the mind, in which its joy and happiness seem to extend to all around.

M. Falret notices two general forms of morbid change in the affections, one which consists in an exaggeration of previously existing dispositions, the other constituting an entire transformation of the personal character. Either of these may be insidious in its progress; but, however concealed, if once clearly detected, must be regarded as an indication of approaching insanity: this is especially true where the change is that of hatred for love towards those previously cherished, or of desire for things or persons hitherto shunned. In some cases the affections, instead of being either exaggerated or perverted are altogether annihilated; instead of an intelligent reasoning, being there remains only a mere automaton.

These disorders of the affections, M. Falret remarks, are always more concentrated, and are less apparent than disturbance of the intellectual faculties. The former are to be observed in the actions, while the latter reveals itself in the words. The moral attributes or affections are more closely allied to the conscience, the influence of which is necessary to self-government, and which does even occasionally control and oppose the manifestation of disorders of the affections. This authority not being equally put in force in the exercise of the intellectual faculties, the insane has no check upon the disorder of his ideas. Thus in melancholy it is more difficult to prove the existence of delirium than in mania.

The author reviews these various lesions of the affections under their relations to the two principal forms of mental diseases—general and partial insanity. In speaking of partial insanity, M. Falret observes that the predominance or persistence of certain sentiments has been singularly exaggerated. The insane having been represented as dominated exclusively and persistently by one clear and definite idea. Nothing can be more contrary to observation. Undoubtedly there is

frequently in partial insanity the predominance of some one affection or propensity, or even of a particular series of ideas, neither however being exclusive, distinctly arranged, nor continuous. So far from of itself constituting the malady, the dominant sentiment or idea has generally been found to exist in the midst of a confused crowd of ideas; even in the least complex cases the patient is absorbed, not concentrated, in the sphere of a single affection. Moreover, the sentiment which is represented as continuous in its action, manifests itself, on the contrary, in a remittent manner, and as it were by paroxysms. The varieties of partial insanity in which the dominant lesion can be determined, are chiefly those which are denominated mania without delirium, moral insanity, and certain states of melancholy.

M. Falret proceeds to the consideration of disturbances of the intellectual powers in the insane. These he arranges under two general divisions, those characterized by torpor and those characterized by increased activity of the intellect. Torpidity or dulness is traced to two causes: the state of inertia of the intellectual faculties, and the preponderance of ideas or sentiments which engross the whole intellect, leaving it inaccessible to the external world and internal impressions, or, as we are wont to express it, the state of complete abstraction. These two conditions, although different, have often analogous modes of manifestation, which are to be guarded against in order to gain an exact idea of the malady, the treatment to be employed, and the opinion to be formed as to the prospect of cure. The apparent analogies are—penury of ideas, slowness of movements, and, moreover, the persistence of these two conditions despite diversity of excitement. The points of difference are to be found in the physiognomy: a certain degree of animation of countenance and concentration of traits, in the one case; a feebleness expressed in the features, and a vagueness in the eyes, in the other. In the latter also there is habitual weakness of memory, evidence of the feebleness of other faculties; in the former, under certain influences, the exclusive occupation with one train of thought can be diverted.

Increased activity of the intellectual faculties is equally remarkable in insanity: the abundance of ideas being greater than can be reduced to order, a confusion is produced and increased by the variety of emotions giving rise to them; so rapid and varied are the changes of expression and actions, that it requires to have witnessed it in order to the formation of any idea of the effect. In some cases this increased activity of the intellectual powers is not to be measured by the number of ideas, but by the predominance of certain faculties, as that of memory or imagination; for instance, the insane often excite astonishment by the recital of long passages from orators or poets, which had

been supposed to have been long effaced from the memory; or they surprise by the prodigious facility with which they recal facts, dates, &c., with a precision of which previously they were incapable. The approach of a relapse into insanity is often correctly pre-indicated by an increased energy of intellectual faculties. It is to feebleness or other lesions of memory, combined with an exaltation of the feeling of wonder or self-love, and disorder of the judgment, that perverted notions of personality are to be traced.

M. Falret traces the disorder of the faculties of attention, judgment, imagination, will, conscience,—exhibited by the insane. Of the faculty of attention the author remarks, that incessantly scattered among or spread over an immense number of objects, it appears weaker than it really is, in general delirium; that in partial delirium it is often unemployed, the patient being completely absorbed; that in dementia the attention, like other faculties, is entirely abolished. The author here proceeds to combat the opinion of Esquirol, which attributes all disorders of the understanding to lesions of attention. This isolation of the faculties in the state of disease, as in health, appears to M. Falret to be arbitrary and impracticable. It is incorrect to attempt to resolve the disorders of all faculties into disorder of one only, overlooking the fact that all contribute or participate in different degrees.

Lesion of judgment, the author observes, is, without contradiction, the most prominent psychical phenomenon in mental alienation. "How could it be otherwise," he asks, "when to judge requires the concurrence, in the highest degree, of all the faculties." The judgment is, in fact, the exact expression of the rectitude or irregularity of all other faculties.

Regarding the free-will and conscience of the insane, M. Falret remarks, that the law is in accordance with science when it regards their lesion as the phenomenon in insanity the most constant and the most worthy of attention. That an insane person is not responsible for his acts is a principle held sacred in the legislation of all people. The author describes two profound modifications of the will, constituting distinct groups among the insane; the one in which it is absent, the other in which it is exalted. The former is more frequently observed in the outset of partial insanity with sadness, and has for manifestation extreme circumspection, very great indecision, and an inability to determine upon the most trivial circumstances. This feebleness of the will is also met with in more advanced stages of the disease, when the faculties show evidence of decay or complete ruin. The state of exaltation of will is denoted by excessive desires, and an imperious impulse to action; by a wish for the realization of every thought, for the execution of every plan, by a disposition to assume command; and

generally by a tendency to delirium. These morbid states of the will are often derived from, and augmented by, lesions of sensibility.

From these considerations, the author continues, it is easy to infer that the insane have not a consciousness of good or evil in their acts; the three elements of our determinations, *savoir*, *vouloir*, and *pouvoir*, being at variance. The insane man is distinguished from the sane man by his exaggerated or illusory motives of action, by the suddenness of an impulse become imperious, and by the absence of the reflection which attends the acts of a reasonable being. The motives to any act are not wanting in the insane, but they are based upon illusion or hallucination: short of general delirium, or total obliteration of all faculties, conscience is not abolished in the insane, but their will and moral liberty are more or less strongly chained down or controlled in action by perversion of feeling or intellect, such as we see, in a minor degree, in passion.

As before observed, the author warns his hearers against the separation of the faculties in their disordered condition, and in the next place discusses the results of the morbid action of the faculties in the production of delirious ideas. The origin of delirious ideas in insanity is, by M. Falret, referred to two categories: they arise spontaneously, or are suggested by other ideas; by the same causes, in fact, which give rise to healthy ideas in the normal state. The former are the exceptional cases, and are indeed denied by those psychologists who deny the spontaneous origin of ideas in the mind.

For the production of a fixed predominant idea, both occasional or accidental causes, and permanent, profound, or predisposing causes, are requisite. In order that an idea shall take root, the soil must be prepared for its reception. The mind may hesitate long in making its selection before it may fix in a definite manner upon that which shall satisfy all the conditions into which it has been brought. "An attentive observer," remarks M. Falret, "tracing this first period of the evolution of a fixed idea, witnesses one of the most curious spectacles imaginable. He sees a man the prey of a disposition imposed by this malady, striving from time to time to rid himself thereof, but ever falling back under its tyrannical influence, and constrained by the laws of his mind to seek for some form under which to give it a body and a definite existence. He will be seen successively to adopt and to repel the divers ideas which present themselves to him, and laboriously striving to deliver himself of a delirium which shall be the expression, the exact image, of an internal condition of which himself, after all, suspects not the existence." This first phase in the evolution of the fixed idea, this gradual and progressive creation of delirium, constitutes the period of incubation of insanity.

Immediately that insanity is fully confirmed, a second distinct period in the development of the fixed idea is apparent. One principal idea forms the centre towards which other minor deliriums converge. Other delirious ideas he succeeds in systematizing in relation to the one fixed idea, constituting the truly acute period of mental disease. All accessory or secondary lesions of the intellect or sensibility gradually vanish, leaving the fixed idea stereotyped in the mind, and forming the chronic stage of the malady.

In the third Lecture, M. Falret discusses the nature of illusions in the insane, which he regards as in no way differing from other lesions of the intellectual faculties than that they have a sensation in place of an idea for their object. The author, however, treats of these separately, in obedience to custom. Esquirol had traced a marked difference between illusions and hallucinations; in the former there is a lesion of sense and an actual impression; in the latter a lesion of the brain and absence of external impression. In this distinction the author does not concur; he admits only one of these characters; he does not believe, at least in the majority of cases, in lesion of the sense in illusion, but he admits the existence of an external impression in the one case, and its absence in the other. M. Falret considers, contrary to Esquirol, that both illusion and hallucination are cerebral phenomena, of which the cause and the interpretation are to be found in lesions of the intellectual faculties. The difficulty, in practice, of detecting the lesion of the sense must not determine us to exclude altogether its influence in the production of illusion; at the same time it is maintained that this is very unfrequent, or at least is only occasionally the exciting cause of the intellectual lesion constituting the illusion.

In the fourth Lecture, the author compares certain physiological states with that of hallucination—such as dreams, somnambulism, &c. Hallucination, M. Falret designates a purely psychical symptom; one which denotes a transitory indisposition, or a disorder of the brain impending, or actually existing. It may, however, be entirely accidental, connected and disappearing with peculiar circumstances. Instances of this kind are given by the author; in these there has been an instantaneous production of images without belief in their reality, and consequently without delirium. Such hallucinations exist in periods of superstition and mysticism.

In the next place, the author proceeds to the consideration of hallucinations undoubtedly delirious, and to the solution of the question which has been answered in the affirmative by distinguished mental physicians, viz., the existence alone, as a form of insanity, of hallucinations confined to one sense. The author does not hesitate in his

answer; as he does not admit the existence of madness limited to a single series of ideas, so he would reject the alleged monomania. The facts recorded in the annals of science, relating to hallucination of one sense, M. Falret asserts are very few, and those who have recorded them have overlooked their true relations. The hallucinations of distinguished men, by which the world has often been misled into a belief of their inspiration or intercourse with supernatural agencies, have been but the culmination of their delirium, which may have been so evanescent as to have escaped observation.

While denying the existence of sensorial monomania, the author recognises a form of insanity restricted to a small number of objects, and with predominant hallucination. As in ordinary partial insanity, it may be gay or sad, expansive or concentrated. In such cases the hallucination is the principal fact, the centre upon which turns the greater part of the intellectual and moral perversities. These hallucinations may present degrees of intensity, as they are not always equally clear and distinct in the persons in whom they exist. Thus, as to hallucinations of the sense of hearing, there will be at first merely buzzing and other noises in the ears, which become confused and mistaken for sounds of clocks, &c. Carried to a higher degree, the same are regarded as sounds from heaven, celestial harmonies, songs of birds, spiritual conversations. These gradations mark the phases of insanity in its commencement and also in its decline, when an hallucination will survive the delirium, and is no longer believed to be real by the patient. It is to be borne in mind, however, that the persistence of this phenomenon is to be regarded as a lingering spark, which may at any moment burst out again in a destructive conflagration.

In the following, the fifth Lecture, the author points out some of those characters of gesture, expression, &c., of the insane, which denote the presence of hallucinations. These, like illusions, lose their intensity and frequency in proportion as the intelligence diminishes, *i. e.*, in the chronic state, or dementia. Hallucinations presuppose too great activity of the mind, too exalted a condition of the imagination, to be compatible with idiocy.

The degree of mental cultivation, or of development of the intellectual powers, more particularly of the imagination, produces great difference, not in the fundamental nature of this psychical phenomenon, but in its intensity, and the number and variety of its images. Where the mind has been but little cultivated, the delusions are usually connected with the most ordinary affairs of life; in the more highly accomplished, the dreams and hallucinations often form *tableaux* possessing both beauty and grandeur.

M. Falret examines the statement of Esquirol, that of one hundred

insane individuals, forty-five at least have hallucinations. This estimate, although generally admitted, is not borne out by the author's observations. Of one hundred and three patients of all ages, in the Salpêtrière, presenting all varieties of insanity, under the author's care for various periods, from fourteen days to five years, averaging eighteen months, only thirty-two were found to possess hallucinations, either simple or complex. Of one hundred and ten inmates of the establishment at Vannes, of both sexes, at all ages and varieties of mental disease, only thirty-four presented hallucinations. The causes of the exaggeration of the numbers of insane having hallucinations are, in the first place, the difficulty of distinguishing between these and illusions, and the different interpretations put upon the language of the insane. A second cause of error is to be found in the circumstance that the insane makes himself the centre of all occurrences surrounding him, by which means he interprets everything according to his own distorted views, and transforms unimportant occurrences into events of the highest importance.

From the consideration of hallucinations in general, the author proceeds to the consideration of these as manifested in the special senses.

In the sixth Lecture, the author examines the principal theories that have been propounded for the explanation of hallucinations, refuting both the theories which consider these to have a sensorial origin and nature, and those which regard them as essentially intellectual, or partly intellectual and partly sensorial. In M. Falret's opinion, hallucinations can be explained only by regarding them as lesions of the imagination, not, however, entirely excluding all cerebral influence; that hallucinations belong to a modification of the cerebral action analogous to that which in the healthy state attends the exercise of the imagination. The imagination acts without control in dreams, and produces hallucinations; in the waking state also the imagination, operating upon the materials furnished by the memory, creates veritable images, varying with individual disposition, but which are almost uniformly at variance with reality. The author sums up his observations on this subject in the following manner:—

“1. That Esquirol has based his distinction, between hallucination and illusion, upon two secondary characters; a lesion of sensation and the actuality of the impression in the one case, and upon the absence of these in the other.

“2. That in order to establish these differences truly scientifically, they must be sought for in the domain of the intellect.

“3. That the facts collected by Esquirol, under the name of illusions, should be divided in two categories, in one of which these are almost

identical with hallucinations, while in the other they differ entirely, and are confounded with other phenomena of delirium."

The seventh Lecture treats of the physical phenomena of insanity. These are arranged under the three several heads of lesions of sensation, motion, and organic functions. Lesions of sensibility are divided into the general and the partial, these two states affording grounds of the distinction of the disease into the expansive and the depressive forms. Disordered conditions of the general sensibility lead patients to believe that certain parts of their bodies have undergone change of shape or proportion, or that the composition of their entire frame has undergone metamorphosis. Phenomena of a similar nature are known to occur in ordinary dreams. Diminution of sensibility is less frequently met with than its exaltation. In many patients delusions depend upon perverted sensation. In others there is an entire indifference to suffering, under which state they will inflict mutilations, &c., expose themselves to frost, snow, rain, &c., without manifesting indications of pain. These, however, as the author observes, are exceptional cases, an indifference to changes of weather not being an invariable attendant upon insanity.

Lesions of motion demand attention, as they may be symptoms of cerebral disease, as the bases of prognosis, and as the source of indications of treatment. The various modifications and derangements of the muscular system, as expressed in the countenance and in the limbs, and as exhibited in chorea, spasms, convulsions, &c., are glanced at by the author in relation to mental maladies. Among the lesions of the organic functions noticed by M. Falret as occurring in the insane, are sleep, generation, nutrition, secretion, pulsation, respiration.

In the three following Lectures, M. Falret points out the course of insanity, describing the signs of predisposition, the period of incubation and gradual evolution, the period of invasion, and the actual existence of the disease; its various phases, changes, complications, and terminations.

These latter pages of the author's work are so strictly practical, that to have done them justice we must have transferred them to our pages; but as, in reality, their value arises out of the truthfulness with which well-known phenomena are depicted and set before the reader, we shall better discharge our trust by referring our readers to the treatise wherein they are contained.

ART. V. — ON THE CLASSIFICATION OF MENTAL DISEASES.*

THE name of Baillarger is widely and favourably known to the psychological world. Trained in the school of Esquirol, he inherits in a remarkable degree the enlightened spirit of practical observation which distinguished that illustrious physician. He has long been, in conjunction with his able confrère, Brierre de Boismont, one of the editors of our continental contemporary, the *Annales Médico-Psychologiques*. His name is familiar to the British medical world through a course of Lectures "On Mental Alienation," delivered by him at the Salpêtrière, and edited by Dr. Barnes, one of his pupils, in the *Lancet* in 1844-5. M. Baillarger takes a foremost position by his zeal, his experience, his abilities, and his original researches, in the rank of those physicians who have of late years contributed to the improvement of the condition of the insane, and who most worthily uphold the honour of the profession in the great department of psychology. When, therefore, a physician occupying so honourable a position, and so well qualified for the task of instruction, announces an essay upon the classification of mental diseases,—that is, upon the very fundamental questions of psychological science,—our expectations are raised to a proportionate height.

Classification is at once the foundation and the highest expression of our knowledge. Classification, which in dogmatic teaching precedes and serves for an introduction to the study of a given science, must, in logical order, be the last enunciation, the final generalization of our previous knowledge of that science. Considered not in a dogmatic point of view, but in that natural and more instructive spirit which is content, with patient inquiry, to follow the gradual progress of knowledge resting upon slow accumulations of experience and the well-weighed deductions of reasoning, classification,—that is, a classification that shall be rigorously exact,—must be postponed until the last term of scientific investigation, until we have adequately mastered all the antecedent elements which are to be the subject-matter of classification. If this truth apply to science in general, it of course applies to psychology. We think it important to refer to this fundamental principle, because there exists a disposition, arising out of the natural indolence of the human mind and its consequent readiness to accept the dictum of authority as a substitute for knowledge, to look upon classification not in the only true light we have indicated, but as *aide-*

* *Essai de Classification des Maladies Mentales*. Par M. Baillarger, Médecin de la Salpêtrière. Paris, 1854.

mémoires, as a sort of pocket compendium, containing in themselves the essence and concentration of all useful knowledge. That this error is especially prevalent in psychology, as well as in other departments of medicine, we have often occasion to deplore. Given a definition of insanity, given a definition of a delusion: and straightway many a man—not so often of the medical profession, as members of the bar or the general public—thinks himself competent to pronounce an unerring judgment upon the sanity or insanity of any particular individual. The tendency of slothfulness to accept definitions and classifications on authority, and the impulse of temerity to apply them in practice, if indulged, cannot but prove a serious discouragement to independent inquiry, a great obstacle to the progress of learning, and the source of many grievous practical errors. Admit that a given classification of mental diseases is perfect: for the minds of the majority this would be equivalent to an admission that the science of mental pathology is perfect; that the disorders of the mind have been explored and fathomed to their nethermost depths. Howsoever attractive a definition or a classification may appear, we need not say that we are as yet very far indeed from such a consummation.

But it may be urged that we cannot do without definitions and classifications. We will grant that *it is difficult* to do without them; that rightly used, not strained beyond their proper use, they are valuable aids and *guides* to the acquisition of knowledge. But they must be lightly worn. We must ever jealously keep watch, lest they usurp an undue dominion over our judgment. We must be ready at any moment to discard them, when we find they will not embrace all the facts they were made to include. They must be not our masters, but our most obsequious servants.

And yet the ambition to frame definitions, to construct classifications, has always influenced the great teachers of psychology. It springs in a great measure from the natural longing, that seizes upon the most patient inquirer, to arrive at the term of his labours, to reach that point where he may rest, and look behind him and contemplate what he has achieved. Many thus hasten on to the goal. It is given to few to reach it honestly. The course marked out by the hand of science is often broken and difficult. The asperities are not fairly overcome, but evaded: a short cut is not seldom preferred.

But to enter upon the task immediately before us. How far has the learned physician of the Salpêtrière succeeded in the solution of the problem? We may at once relieve ourselves from any attempt to inquire how far the essay before us, or rather the classification propounded in it, extends our knowledge of mental disease. The essay makes no pretension of this kind. The author is far too much versed

in the daily practical difficulties met with in our intercourse with the insane to fall into the vulgar error we have endeavoured to combat, of supposing that the most symmetrical definitions can stand in lieu of exercised skill and an intimate acquaintance with minute details. The essay in question is an introductory discourse to a series of dogmatic and clinical lectures delivered at the Salpêtrière. He tells his pupils that he has "striven to render his classification as practical as possible, and to supply them with a method which should serve as a guide in their study of patients." This is the true spirit. On no other condition could we consent to listen to a classification at the *outset* of an extended inquiry into the nature and treatment of mental diseases. He does not, by his initiative classification, profess to prejudge the disputed questions in mental pathology. It is only advanced as an instrument, an *organon*, to facilitate inquiry. We may therefore proceed at once to consider the terms of his classification, and to discuss its merits and defects.

M. Baillarger begins, as every one begins who has a new theory to enunciate, by showing the fallacy of former theories. He assails all previous classifications with the general objection that they are based upon purely psychological data, and that they cannot be applied to clinical observation. He exposes the contradictions existing between the definitions proposed by M. Delasiauve and M. Guislain, in order to throw discredit upon what he calls the purely psychological method. Thus M. Delasiauve divides mental alienations into *intellectual* or general, and *sentimental* or partial. "But," says M. Baillarger, "in the first rank amongst intellectual alienations you place mania. Now, M. Guislain tells us that 'mania is a disease of the moral, apyretic, irresistible, in which there is exaggeration of one or more of the phrenic functions, characterized for the most part by a state of agitation, or sometimes by a manifestation of active or violent passions.' Thus, then, the kind of insanity which you regard as the type of intellectual alienations is precisely that which M. Guislain regards as a moral alienation." In this manner, certainly striking, but not free from error, M. Baillarger, by contrasting the definitions of two eminent physicians, and exhibiting their inconsistency with each other, thinks to overthrow all definitions based upon psychological distinctions.

Before stating his own classification, the author thinks it necessary to define the meaning to be attached to the words, *Folly* (*Folie*), *Delirium*, and *Mental Alienation*. He has recourse at once to an example; that is, he substitutes an illustration for a definition. He says, "It is not rare, when an insane patient has recovered, to see him preserve a residuum of his disease. Thus we have at this moment a curious instance of this kind. A woman who was completely insane

during seven or eight months, recovered several years ago, and now fulfils in the establishment, with considerable skill, a very difficult office. Nevertheless, she preserves a very serious symptom of her original affection. She remains subject to hallucinations of the sense of hearing; but she perfectly accounts to herself for the phenomenon she experiences. This is why I say that, being no longer mad or insane, she is nevertheless affected with a serious lesion of the intelligence." "When she was mad or insane, she had not the consciousness that her understanding was impaired, she did not appreciate the errors of her condition, or else she held them for realities; in a word, this woman was cheated by her malady. Now, on the contrary, she judges of her hallucinations in the same manner as the physician himself judges of them; she recognises them as sensations without object; the sick woman knows herself to be sick, and that is enough to make her no longer mad." . . . "Let us rest, therefore, upon this point, that the lesion of the intelligence and the loss of the consciousness of this lesion, are two very distinct facts, and that both are necessary to constitute a true mental alienation."

M. Baillarger next anticipates an objection that might be urged. He admits that "there are patients possessing a perfect knowledge of their condition, and who are not the less insane. This is the case with persons subject to uncontrollable impulses (*impulsions insolites*.)" In this case the distinction would be derived from the defective power of the will. "But," he continues, "uncontrollable impulses are not sufficient to constitute insanity." He cites the case of a man who, during twenty years, struggled against the impulse to kill a mother whom he tenderly loved. This man left his country in order to protect himself from the danger which threatened him. It was only after twenty years that this impulse to murder overcame the efforts of his will. The patient feeling himself conquered, applied to be restrained. From that moment there was insanity. Hitherto, the voluntary faculties were deeply affected, but the patient was not insane. "Thus the lesions of the intelligence and of the will are so distinct from insanity or alienation, that these lesions may exist without insanity or alienation. These distinctions teach us, moreover, that insanity has two sources; the first, which consists in the loss of the consciousness of the lesions of the understanding; the other, in the want of power to control certain impulses. . . . It results from these distinctions that *insanity is the privation of free will, in consequence of a disorder of the understanding*. It is important to remark that free will represents both the integrity of the consciousness and of the will. Hitherto, two very different elements of insanity have not been sufficiently distinguished: the lesion, on one side, and the loss of consciousness on the other."

Is this definition of M. Baillarger's secure from the assaults of criticism? In the first place, is it free from that general objection with which he has himself attempted to demolish all previous definitions? Is it not psychological, like the rest? In the second place, is it new? Is it something essentially distinct from other definitions, or is it merely a variation in the mode of expression, in the manner of stating? In the third place, we will ask, What shall we gain by adopting it?

1. What is the fundamental character of this definition? It is drawn from the observation of the condition of the intellectual and moral faculties. It rests upon an appreciation of the integrity or impairment of the intelligence, of consciousness or judgment, and of the will. Is not such a method strictly psychological? Does it acquire a different character because the author lays it down as necessary to his definition that there should be the coincidence of *two* distinct mental phenomena,—the lesion of the intelligence and the loss of the consciousness of this lesion? The two phenomena are both psychological; shall the resultant third condition be other than psychological?

2. Is the definition new? We think not. Is there any notion of insanity more general than that which rests upon the distinction, so very clearly put by the author, between the lesion of the intelligence and the loss of consciousness or judgment? So long as a man is conscious that the sensations he is subject to are unreal, so long as he knows that his conceptions are false, so long is he held to be sane. When, on the other hand, he gives way to the belief that his morbid sensations are real, that he takes his false conceptions for true, that he does not perceive their absurdity or incongruity, then he is on all hands pronounced insane. That is what M. Baillarger says, and what has long been said by others. Nor are the terms or the form employed by M. Baillarger very different from those in common use. The definition of M. Baillarger is, therefore, psychological, and not new.

3. Our third question, What shall we gain by adopting M. Baillarger's definition? is pre-determined by our answers to the two preceding questions. It will continue to be useful as a guide to practical investigation. It must not be accepted as the ultimate expression of medical science. It must not be allowed to stand in the way of further inquiry. When M. Baillarger says that hitherto we have not sufficiently distinguished two very different elements in insanity—the lesion on the one hand, and the loss of consciousness on the other—we are ready to admit the general value of this analysis or resolution of the component parts of insanity. But some reservation is necessary. It is not always easy in practice to effect this analysis,—that is, not by the chronological process. Marked antecedence in time of the lesion, which M. Baillarger ranks first in order of importance and of development, over

the loss of consciousness, cannot always be observed. Frequently they set in, or at least are observed, simultaneously; and frequently they disappear simultaneously. In logical sequence it may appear that at first sight M. Baillarger's theory, which assigns the first place in time and importance to the lesion, and the second to the loss of consciousness, is correct. But we may ask, is this the constant order of Nature? If we accept M. Baillarger's definition in the term he has employed—namely, *loss of consciousness* of the lesion, we give up the matter; we place it beyond dispute. The term we have quoted is a *petitio principii*. It is obvious that the lesion must pre-exist, or it could not be the subject of loss of consciousness. But if instead of accepting the term, loss of consciousness, we inquire whether that intellectual faculty which compares, judges, and decides, may not be diseased independently and primarily, what must our answer be? Are there not cases of insanity in which the disorder of the intelligence, by which M. Baillarger means the faculty of conception, plays but a secondary part, in which the lesion of the understanding, or of that faculty which, according to M. Baillarger, leads to the loss of consciousness, is primitive? Can we, with the experience of clinical practice present to our minds, yield our assent to this proposition, enunciated by M. Baillarger: "The lesion of the intelligence is the more important element for the physician; when you have cured this, you will well nigh have cured your patient"?

Taking a departure (which he thinks a secure one) from this definition, our author proceeds to develop his classification. He complains that writers have, for the most part, dwelt far too much upon the general history of insanity, to the neglect of the more practical history of the forms of insanity. He observes very justly, "That we must carefully distinguish the alienation conceived in an abstract and general manner, as it is allowed to philosophers and magistrates to define it, from the alienation which comes under the observation of the physician, and which he has to treat." M. Baillarger, however, recognises the importance of studying the subject both generally and specially. The general pathology of insanity (he says) will comprise the physiology of delirium, and of all the other generalities which in methodical teaching precede the study of particular diseases. Under special pathology are ranged the description and the study of the different forms of mental alienation. General and special pathology, therefore, constitute the two leading divisions of M. Baillarger's methodical classification.

MENTAL DISEASES.

GENERAL PATHOLOGY.

Elementary Lesions of the Understanding.

<i>Partial.</i>	<i>General.</i>	<i>Primitively Partial, but tending to become General.</i>
Delirious conceptions.	Depression of the intelligence.	Dissoeiation of ideas.
Uncontrollable impulses.	Exaltation.	Abolition of the intelligence.
Hallucinations.		

The Elementary Lesions of the Understanding may Exist.

1. With preservation of the reason.
2. Accompanied by insanity.

Insanity, the Consequence of the Lesions of the Understanding.

Two kinds of insanity characterized by

<i>The first,</i>	<i>The second,</i>
By the loss of consciousness of the lesions of the understanding.	By the simple inability of the will to resist certain impulses.

SPECIAL PATHOLOGY.

Forms of Mental Diseases.

SIMPLE FORMS:

MIXED FORMS:

<i>Curable.</i>	<i>Incurable.</i>	
Monomania (partial lesions).	Incoherent dementia (dissoeiation of ideas).	Combinations of the curable forms, or of incurable forms with incurable.
Melancholia (general lesion: depression).	Simple dementia (abolition of ideas).	
Mania (general lesion: excitation).		
Insanity of double form (depression and excitation succeeding each other regularly in the same patient).		

*Mental Diseases,**Owing to a specific Cause.*

Delirium tremens.
Delirium produced by belladonna, datura, haschich, &c.

Associated with Cerebral Affections, following upon or symptomatic of these Affections.

1. General paralysis.
2. Convulsive affections, epilepsy, hysteria, chorea.
3. Local organic affections of the brain.

Appendix.

Imbecility, Simple with cretinism.

These tables sufficiently explain the leading principles of M. Baillarger's classification, and dispense us from the task of following him through a minute exposition of the various heads. We, however, think it useful to draw attention to the three partial elementary lesions of the understanding, as distinguished by our author, a distinction, we believe, descending from Esquirol. Uncontrollable impulses ought, in strict propriety, to be distinguished from lesions of the understanding. Springing as they do from a lesion of the moral affections, and existing not seldom in conjunction with more or less integrity of the intellectual faculties, it seems (although the objection is psychological, and therefore not one, we suppose, that would weigh with our author) improper to place it between two lesions in which the intellect simply is affected. The distinction between delirious conceptions and hallucinations, conditions usually confounded in this country under the common name of delusions, is important. There is surely something generically different between delirious conceptions—consisting in false ideas, extravagant, ridiculous and absurd, impossible of execution, springing up in the diseased mind of the patient, and not immediately excited by real or supposed impressions upon the senses falsely interpreted—and hallucinations consisting in an apparent perversion or disorder of the organs of sense, in which either sensations are perceived in the absence of all external excitation, or in which certain real excitations of the senses convey to the mind impressions widely different from their real nature. It may be urged that in ultimate analysis both these conditions are resolved into one and the same morbid state, in which the judgment is perverted, and is unable to appreciate correctly the error of ideas and the false suggestions of the senses, and that therefore the common term delusion may properly apply to both. But in practice we still hold that the distinction is useful, and that it deserves to be more attended to than is usual among us.

M. Baillarger is at some pains to defend his description of *depression* and *exaltation* of the intelligence as *general* lesions. We think his view in strict accordance with clinical experience. In those cases marked by depression, and they are the most numerous by far, it is impossible not to observe that the depression tells with a paralysing weight upon all the faculties of the mind. There is no such thing as partial depression. This is a point upon which M. Guislain strongly insists. The celebrated professor of Ghent goes so far as to contend that alienation is truly a grief; that it is primitively a phrenalgia; and that a profound depression is the most constant and universal symptom amongst the insane.

We have nothing to observe relative to the lesions of the understanding, primitively partial but tending to become general. The

remaining divisions of the first table, based as they are upon M. Baillarger's fundamental definition, which, being already sufficiently discussed, need not again arrest our attention. We proceed to offer a few reflections upon the second table, which embraces the special pathology of insanity, and which may be said to present the author's opinions, expressed in a clinical and practical point of view. Under the common head of simple forms he preserves the old forms of monomania, melancholia, and mania, without disturbing the notions generally attached to these words. These are all ranged together as curable. His division of dementia into incoherent, marked by dissociation of ideas; and simple, marked by abolition of ideas (although the first form is often but the prelude or transition state into the second), is useful. His third division of "Mixed Forms," expressly framed to find a place for those common but anomalous cases which refuse to obey the laws of systematic nosologists, exhibiting characters which perplex by their variety and seeming incompatibility, displays, we ought not to say, the variety of classifications, but the necessity of circumscribing our expectations as to the fruit to be gathered from them.

In his division of mental diseases owing to a specific cause—in which M. Baillarger includes delirium tremens, and the delirium caused by certain poisons—we think he might also have placed with propriety the delirium arising from fever, specifying those forms of fever, as typhoid and others, which are evidently associated with toxæmia. The relation of this form of delirium to those connected with more obvious poisoning of the blood is manifest. It cannot with propriety be classed along with those forms of insanity which are associated with local organic affections of the brain. It may be quite true that in many cases of fever, meningitis, or other cerebral lesions, may supervene, but these are not primary and essential characters. In the majority of cases of ordinary fever, especially of those that terminate in recovery, the cerebral affection is not organic, but functional, and the consequence of disordered nutrition or unnatural excitation, arising from the altered state of the blood.

We now arrive at another important distinction much insisted upon by M. Baillarger. He divides mental alienations into *idiopathic* and *symptomatic*. In every case, he says, the determination of the question, whether it be idiopathic or symptomatic, should be aimed at. He even says that, *with very rare exceptions*, the distinction may be made even at the outset of the disease. This proposition would appear rather startling, were we not to hasten to explain the precise meaning M. Baillarger attaches to the words idiopathic and symptomatic. The signification in which he uses the word symptomatic is indeed sharply defined, but it is somewhat arbitrary. We need not

tarry in order to extract from our author a definition of idiopathic. He nowhere states it precisely. But he defines symptomatic with great precision: so that by a simple process of elimination we may call everything that is not symptomatic, idiopathic—"Those mental alienations are symptomatic which are so of some other cerebral affection." Were he to stop at this point, we think he would hardly be able to justify his dogma that, even at the outset of any case of mental disease, it is easy to decide whether it be idiopathic or symptomatic. Surely we are not yet so far advanced in our knowledge of cerebral pathology as to be able, even in the great majority of instances, to pronounce with certainty upon the presence or absence of cerebral complications. Still less frequently are we in a condition to decide whether—a particular cerebral lesion being discovered, or supposed to be discovered—that lesion was the causative antecedent of the associated mental disorder. But these difficulties are summarily pushed aside by M. Baillarger. He excludes all affections of the heart, stomach, urinary passages, and of all other organs, except of the brain, as having any pretension to be the foundation of symptomatic mental diseases. We cannot here pursue our objection to this exclusion. But we may state, as the result of daily clinical observation, that many mental disorders in women, some rising to all the significance of actual insanity, are truly symptomatic of primitive disease in the organs of generation. Unless the word be wrested forcibly from its usual acceptation, we cannot see why these affections are not entitled to be called symptomatic. But the fact is, M. Baillarger does affix to the word a meaning of his own, and he tells us very intelligibly what that meaning is. He takes no account of any other "cerebral affections but *those which are revealed by disorder in the muscular system.*" He even specifies the kinds of muscular disorder,—namely, general paralysis, epilepsy, hysteria, and chorea. But even this strict limitation is far from removing all occasions of difficulty and error. With the single exception of general paralysis, it cannot be admitted that the muscular disorders are invariably symptomatic of cerebral disease. The attempt, therefore, to link any given cases of mental alienation to cerebral disease, by means of concomitant lesions of the muscular system, signally fails. It appears to us that it would be better to take the larger and less defined signification of the word symptomatic, and to preserve a second place as an *asylum ignorantie* for those numerous cases in which our best-exerted skill is baffled in the attempt to trace any relation between the mental alienation and physical disorder. We prefer, on this ground, the division of M. Guislain into idiopathic, symptomatic, and sympathetic. We have thought it the more necessary to state these difficulties that stand in the way of M. Baillarger's classification, because the able physician of the Salpêtrière informs us that his registers at

that asylum are constructed upon the principle he has laid down. He keeps two registers. In the one are inscribed all the insane who are affected with different lesions of the locomotive system, as general paralysis, epilepsy, chorea, hysteria; the other chronicles "all those who present none of the above lesions, and who may *for that reason be considered at once as affected with simple or idiopathic alienation.*" When at any future time account is taken of, or reference made to, M. Baillarger's statistics—and M. Baillarger is a laborious statistician—this fact must be borne in mind. We have now given a full exposition of M. Baillarger's classification of mental diseases. If we have been unable to adopt it unreservedly, if we have felt ourselves compelled to urge the difficulties in the way of its acceptance that occur to us, we are at the same time anxious to express our undiminished regard for the great talents, the vast experience, and admirable candour of the author. He has failed in a task which has stimulated many noble ambitious minds, but in which success would, *primâ facie*, appear to be impossible. He has made that clearer which was clear before—that psychology, both physiological and pathological, is not yet sufficiently advanced to admit of the full application of the inductive method. The classification of mental diseases will long continue to baffle the strongest intellects and the most accomplished physicians.

ART. VI.—ON NON-MECHANICAL RESTRAINT IN THE TREATMENT OF THE INSANE.

IN the Appendix (G) to the Eighth Annual Report of the Commissioners in Lunacy, just published, we find recorded the answers to a circular issued last year by the Commissioners, and addressed to the superintendents and medical proprietors of the principal lunatic asylums, registered hospitals, and licensed houses in England and Wales, requesting information as to the employment or disuse of instrumental restraint and seclusion in the treatment of the insane.

Before proceeding to analyze this important body of conflicting evidence upon a much-vexed question, we would make a few preliminary observations. In the first place, we think we may take, with justice, exception to the term used in the Report, when referring to this subject,—*viz.*, that of "*instrumental* restraint." This phrase conveys to the uninitiated and popular mind a very erroneous idea of the nature and character of the kind of restraint many humane and conscientious medical men engaged in the management of asylums and the treatment of the insane, consider themselves justified in using in certain urgent and peculiar cases of insanity. The word "mechanical" restraint is well understood, but the term "instrumental" restraint im-

mediately suggests to the mind iron-chains, leg-locks, bolts, and other barbarous modes of confining the limbs of the insane, adopted during the dark ages. God forbid that those days ever should return! With a view of estimating correctly the degree of value that should be attached to the evidence we propose analyzing, it will be necessary to bear in mind the following points:—In the first place, many of the gentlemen who have forwarded replies to the Commissioners, and who have expressed an unqualified opinion in favour of non-restraint, are men of but limited experience, having but for a short period been practically engaged in the treatment of the insane. Again, a few of the medical men who answered the circular issued by the Commissioners, are in the habit of admitting into their houses a limited number (to use a phrase familiar to most of those who read the advertisement columns of *The Times*) of “nervous invalids,” a quiet class of patients not at all likely to require the application of mechanical restraint in their treatment. The evidence of these gentlemen is not, therefore, of much value, *quoad* the question at issue. Secondly, we are bound to consider what we conceive to be an important element in relation to the matter under review: viz. that many who have recorded their opinion in favour of unconditional non-restraint would, from their position, hesitate in giving utterance to views adverse to those that have so tenaciously fastened themselves upon the public mind.

A gentleman anxious to obtain *status* in this department of practice, and not having age or experience to guide him to a scientific and right deduction, would pause before committing himself to an opinion opposed to popular prejudices. He would naturally hesitate in adopting what the public have sedulously been taught to consider as the inhumane side of the question; and rather than run counter to this feeling, would at once join the ranks of the extreme party, and throw up his cap in favour of non-restraint. The recorded opinions of this class should consequently be taken with considerable limitations. Thirdly, it is necessary to recollect that many whose answers are published by the Commissioners have, from an early period of their career, pledged themselves to *ultra* opinions upon this question. It is not at all probable that any of these gentlemen would easily be induced to abandon a dogma upon which their whole reputation is based. Fourthly, it will be impossible to draw any sound conclusions from the evidence before us, without being fully acquainted with the *substitutes that have been used for the strait-waistcoat and other modes of mechanically restraining the insane*. Have not the frequent administration of nauseating doses of the tartrate of antimony, the shower and cold bath, in several asylums taken the place of mechanical restraint, producing, as can be readily conceived by those conversant with the pathology of insanity, the most disastrous consequences? The

use of the milder forms of mechanical restraint in cases of acute and dangerous insanity can do little or no permanent injury, but *the repeated and continuous exhibition of tartar-emetic, chloroform, and stupefying doses of opium, with the view of subduing the muscular violence of the insane, and thus reducing them to a manageable condition, and obviating the necessity for mechanical restraint, may do serious and irremediable mischief*; and for this obvious reason, that the patient is compelled to take medicines which greatly depress the nervous system at a time when everything should be done to sustain the *vis vitæ*, and give increased impetus to the nerve force. It does not require much sagacity to reduce, by these means, a violent lunatic to a state of comparative composure and quietude; but we would caution all engaged in the anxious and responsible duties of treating the insane, against the adoption of a course alike dangerous to life, and perilous to reason. All who have recorded their opinion in favour of unconditional non-restraint, and who declare that no case of insanity can possibly arise in which it will be necessary, should be compelled to state to what extent they use the shower, cold-bath, opium, and tartar-emetic, &c., before we can attach any scientific importance to their view of the matter in dispute. Having made these cursory remarks, we at once proceed to our proposed analysis. After carefully examining all the returns made to the Commissioners, we have classified the men agreeably to the following form:—

1. Advocates for a qualified use of mechanical restraint.
2. Advocates for the total abolition of restraint.
3. Those who do not use restraint, but who give no opinion on the abstract question.
4. Advocates for restraint in surgical cases.
5. Those who give a qualified opinion on the subject of restraint.

The subjoined tabulated statement will be found accurate in its details :

Advocates for a Qualified Use of Mechanical Restraint.

J. Harris.	C. M. Gibson, Bethel Hospital, Norwich.
B. F. Mathews, Bedford Co. Asylum.	W. Allen, Warneford Hospital.
John Millar, Bucks Co. Asylum.	John Kitching, The Friends' Retreat, York.
John Bucknill, M.D., Devon Co. Asylum.	James Phillips, Bethnal House.
Richard Oliver, M.D., Salop and Montgomery Asylum.	D. M. Maclure, Earl's-Court House, Brompton.
John Wilks, Stafford Co. Asylum.	D. T. Roy, Montague House, Hammersmith.
John Thurnam, M.D., Wilts Co.	J. H. Paul, Camberwell House.
Samuel Hill, York, North and East Riding. 144.	A. J. Sutherland, M.D., Otto and Blackland House.
Thomas Green, Birmingham Borough Asylum.	John Bush, Clapham Retreat.
Abs. Stansbury, Bristol Asylum.	Ed. W. Momo, M.D., Brook House, Upper Clapton.
F. W. Casson, Hull Borough Asylum.	F. Winslow, M.D., Hammersmith.
B. Formby, M.D., Liverpool Asylum.	

- Bowling and Halford, Normand House, Fulham.
 F. Oxley, M.D., London House, Hackney.
 John C. S. Nicoll, Elm Grove, Hanwell.
 J. W. Holgate, Hindon House, Middlesex.
 Henry Armstrong, M.D., Peckham House.
 J. R. Atkins, M.D., Stoke Newington.
 W. T. Spencer, Stoke Newington.
 L. Glenton, Beushaw Asylum.
 R. Davis, Wickenboy Asylum.
 B. Barkus, M.D., Gateshead Asylum.
 H. Griesback, M.D., Dunston Lodge.
 T. Tomkin, Witham, Essex.
 James Cornwall, Farnford Retreat.
 C. M. Burnett, M.D., Westbrook, Alton.
 S. Millard, Whitechurch House, near Monmouth.
 F. A. Young, North Grove House, Hawkhurst.
 R. F. Ainsworth, Blakeley House, Manchester.
 W. H. Parsey, Warwick Co. Asylum.
 E. Simpson, York Hospital.
 J. Smith, Hadham Palace Asylum.
 D. Noble, M.D., Clifton Hall.
 J. B. Whitehead, Haydock Lodge.
 F. Willis, Shillingthorpe House.
 H. Landor, Heigham Retreat, Norwich.
 W. P. Nicholls, F.R.C.S., Heigham Hall, Norwich.
- W. H. Ranking, M.D., Heigham Hall, Norwich.
 J. F. Watson, Heigham Hall, Norwich.
 D. Mackintosh, M.D., Newcastle-upon-Tyne Asylum.
 R. Mallam, Hooknorton.
 J. H. Norton, Amroth Castle, Tenby.
 F. and C. Fox, Brislington House, Bristol.
 J. Terry, Bailbrook House, Bath Easton.
 W. E. Gillet, Fairwater House, Taunton.
 J. F. Woody, The Moat House, Tamworth.
 G. F. Fumival, Great Foster House, Egham.
 Charles Summers, Great Foster House, Egham.
 J. R. Stedman, Lea Pale House, Guildford.
 C. H. Newington, M.D., Ticehurst.
 S. Newington, M.D., Ticehurst.
 G. Bodington, Driffold Asylum.
 J. Warwick, Laverstock House, Salisbury.
 J. Nash, M.D., Kingsdown House, Box.
 J. Anningson, Marleeceat Lane Retreat, Kingston-upon-Hull.
 G. P. Smith, M.D., Castleton Lodge.
 T. Allis, Fern Hall, Osbaldwick.
 J. W. Metcalfe, Acomb House, York.
 S. Nelson, Grove House, Acomb.
 J. Atkinson, Heyworth Asylum, York.
- Advocates for the Total Abolition of Mechanical Restraint.*
- R. Lloyd Williams, M.D., Denbigh Asylum.
 George T. Jones, M.D., Denbigh Asylum.
 John Hitchman, M.D., Derby Co. Asylum.
 Donald Campbell, M.D., Essex Co. Asylum.
 John D. Cherton, Lancashire Asylum, near Rainhill.
 James Holland, Lancashire Asylum, Prestwich.
 John Buck, Leicester and Rutland Asylum.
 J. T. Allen, Monmouth Asylum.
 R. Foote, M.D., Norfolk Co. Asylum.
 F. D. Walsh, Lincoln Co. Asylum.
 Henry Stevens, St. Luke's Asylum.
 W. C. Hood, M.D., Bethlehem Hospital.
- Edwin Wing, York House, Battersea.
 Alonzo H. Stocker, Grove Hall Asylum, Bow.
 W. F. H. Ramsay, M.D., Wyke House, Brentford.
 W. D. Williams, Pembroke House, Hackney.
 E. L. Bryan, Hoxton House.
 E. V. Hensey, M.D., High Beech Asylum.
 Charles Broughton, Vernon House, Britton Ferry.
 James George Davey, M.D., Northwood, Bristol.
 R. G. Hill, Eastgate House, Lincoln.
 W. H. Hugo, Longwood House, Bristol.
 G. Serase, Ringmer House, Lewes.
 W. Berrow, Duddeston Hall, Birmingham.

J. Kirkman, M.D., Suffolk Co. Asylum.	W. C. Finch, M.D., Fisherton House, Charles Snape, Surrey Co. Asylum.
W. Dickson, Manchester Lunatic Asylum.	R. W. Diamond, M.D., Surrey Co. Asylum.

Medical Superintendents of Asylums who do not use Restraint, but who give no Opinion on the Abstract Question.

D. F. Tyerman, Colney Hatch Asylum, Middlesex.	Smith Slatebrook, Tue Brook Villa, Liverpool.
W. C. Begley, Hanwell Male Division, Middlesex.	W. Cooper, Norwich Infirmary Lunatic Asylum.
J. Stocker, Guy's Hospital Lunatic Ward.	Thomas Pritchard, Abington Abbey, Northampton.
J. B. Steward, M.D., Southall Park.	J. Pownall, M.D., Calne, Wilts.
W. Wood, M.D., Kensington.	Thomas Laycock, M.D., Gate, Helmsley.
A. G. Kerr, Regent's-park.	Caleb Williams, Terrace House, near York.
J. O. Runball, St. Alban's.	

Advocates for Restraint in Surgical Cases.

W. Ley, Oxfordshire and Berks Asylum, Littlemore.	Harrington Tuke, M.D., Manor House, Chiswick.
Robert Boyd, Somerset Co. Asylum.	J. Conolly, M.D.; Hanwell.

Medical Superintendents who give a Qualified Opinion on the subject of Non-restraint.

R. Langworthy, Plympton Asylum.	W. H. Pursey, Warwick Co. Asylum.
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In the first place, we proceed to give the opinions of those who advocate the *total* abolition of all mechanical restraint. Dr. Lloyd Williams and Mr. G. T. Jones, of the Denbigh Lunatic Asylum, say that, "Since the opening of the asylum in 1848, we have never had cause to deviate from the uniform and consistent practice of avoiding the slightest mechanical restraint in the treatment of the insane, beyond the occasional use of the padded room in cases of extreme violence; and the seclusion has been confined to as few cases as possible, and for as short periods as can be avoided. We have sedulously endeavoured to impress upon our attendants that they are never to exhibit the slightest exhibition of temper, or resentment, for conduct however violent or provoking, and that they are to practise 'the law of kindness,' as the code by which the confidence of their patients is to be gained, and their violence subdued."

When speaking of the substitutes for mechanical restraint, they observe that, "In some cases of excessive maniacal violence, we have successfully resorted to immersion in the cold bath, and in other cases to the application of a continuous stream of cold water upon the head, whilst the patient is sitting in a warm bath. The shower-bath is also found of much use in producing tranquillity in similar cases."

"Immersion in the cold bath," and the "application of a continuous stream of cold water upon the head," are questionable modes of procedure, if adopted *merely* to "produce *tranquillity*," and subdue "ex-

cessive manical violence;" if used as a curative means in properly selected cases, well and good.

Dr. Hitchman, of the Derby Asylum, says that since 1843, "I have not sanctioned the use of any kind of mechanical appliance to control the limbs of any refractory or suicidal patients, and I have not met with any case in which, with good attendants, and a well-arranged building, restraint appeared necessary; on the contrary, patients have been brought to the various institutions which have been under my care, who had been rendered more violent and more suicidal by the means taken to control them prior to admission."

Dr. Campbell, of the Essex Lunatic Asylum, uses no mechanical restraint, he observes:—"I feel justified in stating it as my opinion, that personal restraint is in no case necessary for the treatment of insanity in a properly constructed asylum, and that in all cases it is prejudicial."

This gentleman is in favour of seclusion. He says, with a view of "bringing the health of the patient into the best possible state, constant occupation and amusement afford the most powerful means of curing and alleviating the disease."

Mr. Cleaton, of the Lancashire Asylum, Rainhill, has not found mechanical restraint necessary, since the opening of the institution in 1851. He remarks that, "As far as the experience of this institution goes, the best substitute for seclusion, generally speaking, appears to be out-door occupation; and it has been a common practice here with regard to artisan patients, when a paroxysm of excitement comes on in the course of chronic mania, rendering them unable to follow their special avocation, to send them into the land to be employed in simple agricultural occupation, such as wheeling soil, making or repairing roads, &c., and when the attack passes away, to allow them to return to their workshops."

Mr. Holland, of the Lancashire Asylum, Prestwich, says:—"Mechanical restraint has been applied in this asylum only once since it was opened, upwards of three years since, and this would not have happened had that part of the establishment principally used for the treatment of maniacal patients been ready for occupation when the institution first admitted patients. Seclusion is rarely resorted to, except in instances of acute or epileptic mania, of which we have a great number, and in such cases I consider seclusion to be a very essential part of the treatment."

Mr. John Buck, of the Leicestershire and Rutland County Asylum, has abolished all mechanical restraint. We may say the same of Mr. Tyerman, of the Colney Hatch Asylum.

Mr. J. S. Allen, of the Monmouthshire Asylum, says, that since December 1851, "362 patients have been admitted. The great

majority of the cases had been for many years insane, and a large proportion (viz. 51 cases) were complicated with epilepsy. Mechanical restraint or coercion has not been used in any case, and the want of it has not been felt. The general effects of non-restraint on the patients themselves, as well as on the attendants, have been salutary. The patients, with few exceptions, however deficient in intellect they may be, know that restraint cannot be used towards them, and this alone has a tranquillizing effect, as no class of sane persons are more morbidly sensitive as to receiving harsh or unfair treatment than the insane."

Dr. Foote says:—"I have never seen mechanical restraint produce any beneficial effect in the treatment of mental diseases, but have seen many cases greatly relieved by the removal of restraint."

Mr. Charles Snape, of the Surrey Asylum, says:—"Mechanical restraint is never employed where the arrangements are good, and in a properly-constructed asylum I believe this system to be quite superfluous."

Dr. Diamond, of the same asylum, says:—"I believe that any person who would now use personal restraint or coercion *is unfit to have the superintendence of an asylum!*"

This our readers will consider to be a very bold opinion.

"I have," he continues, "at the present time upwards of 520 female patients under my immediate charge; and, during the past five years, have admitted more than 800 cases. In not a single instance has any restraint been used."

Dr. Kirkman, of the Suffolk County Asylum, says:—"The Suffolk County Asylum has been, for the last *twenty-three years*, under the same resident Medical Superintendent, and throughout the whole of that period, the mildest system of treatment has been ceaselessly carried out. All instruments of mechanical restraint were destroyed more than twenty years ago, and they have neither been used or required ever since. It is our uniform practice to enter every case of temporary separation, if a patient is placed only a few minutes in a room, and this is not very often needed, and consequently rarely done. Seclusion in a padded room we have found very seldom necessary. I may state as a general fact, built upon lengthened experience, that association with the insane, and constant supervision over them, will secure that moral control which supersedes the necessity of any measures, which, though they may be used only as preventives against injury to the patient themselves, have a semblance of restriction about them. The mildest treatment is unexceptionably the most successful."

How is it that Dr. Kirkman, having abolished mechanical restraint for a period of *twenty years*, should not be placed in the foremost ranks, or even at the *head* of those who, like Mr. Hill, have claimed the

credit of having originated the "non-restraint system" of treating the insane in this country? Surely Dr. Kirkman is entitled to a testimonial, and after his death (which we hope is far distant) should have a statue erected to his memory!

Mr. Dixon, of the Manchester Lunatic Asylum, says:—"With regard to mechanical restraint, I substitute for it exercise, under carefully-selected attendants, in the grounds and fields belonging to the institution."

Mr. Walsh, of the Lincoln Asylum, says:—"There has been no mechanical restraint used in this asylum since the 17th of April, 1840. I have seen manual restraint, or the holding of maniacal patients, practised here, and believe it to be a most cruel kind of restraint. It is impossible to hold a strong and refractory patient for a long time without injury and danger both to the patient and attendants. During the time that this asylum has been managed without mechanical restraint, seclusion, or manual restraint, I have not seen any cases in which I consider such restraints would have been beneficial, but probably injurious."

Mr. Stevens, of St. Luke's, says:—"I believe the entire abolition of every kind of mechanical restraint to be the most humane, the most efficacious, and, speaking generally, the safest plan of treatment; on the whole, less liable to objection than any other, and perfectly practicable in a well-regulated and properly-conducted institution."

Dr. W. C. Hood, resident-physician at Bethlehem, says:—"No form of mechanical restraint whatever is resorted to in this hospital. The 'Non-restraint system,' as it is called, is adhered to, because it is found to be attended with the best and happiest results; whereas the confinement by straps, belts, or gloves rather increases the excitement, irritates the patient, reduces the necessity of vigilant personal attendance, and not infrequently induces chronic or permanent mania. If, during great excitement (which is generally paroxysmal), the patient cannot be soothed by kindness, temporary seclusion in the bedroom, or, if dangerous, in the padded room, will usually be found sufficient; if not, the administration of sedatives. I prefer giving a full dose, and repeating it in four or six hours. Should the excitement be persistent, and the patient of robust habit, the sedative effect of the anodyne will be of little use. In such cases I have found much value in prescribing small and repeated doses of antimony, a third or half a grain three times a day in solution. I am of opinion that the excitement is consequent upon irritation, and not inflammation, and therefore, unless strongly indicated, always eschew depletion."

Mr. Wing, of Battersea, says:—"My opinion is, that with a sufficient number of proper attendants, the use of such means may be entirely dispensed with."

Mr. Stocker, of Grove Hall, Bow, says:—"I am convinced that the use of mechanical restraint under any circumstances is both unnecessary and unjustifiable."

Dr. Ramsay, of Wyke House, observes:—"I have never myself used or advised mechanical bodily restraint, and I am convinced, that where it is employed all moral treatment is neutralized, and that it militates against the acquisition of the patient's confidence, which last ought to be the first endeavour of the physician who undertakes the treatment of the insane."

Dr. W. D. Williams, says:—"By contrivance, management, and watchfulness, therefore, aided by a staff of kind, intelligent, and quiet, yet active and energetic attendants, it is my opinion that seclusion and restraint may be ultimately rendered unnecessary; and I consider that by the same means bad habits may generally be cured."

Mr. Bryant, of Hoxton House, says:—"That during the last two years and a-half every article of restraint has been removed from the house."

Mr. Kerr, of Regent's Park, says:—"No kind of mechanical restraint is ever resorted to. I have always found that kindness, blended with firmness, is the most efficient mode of allaying excitement, however violent."

Dr. Hensey, of High Beach, says, That mechanical restraint, or over-rigid seclusion, are the sure means of making maniacs of severe cases, and of greatly aggravating the mildest form of insanity, by fretting and irritating minds already sufficiently excited. My plan of treatment is to allow all to do pretty much as they like, and to go where they like, always under the eye of a sufficient number of attendants, who are ready to interfere only when any very great irregularity is attempted, and even then it is generally sufficient to merely catch their eye."

Mr. Broughton, of Britton Ferry, speaks boldly out upon the question. He says:—"In the treatment of the insane, it is difficult to imagine a case in which mechanical coercion can be deemed advisable, or even allowable. No instances have fallen under my observation which could seem to justify its employment, or hold out the attainment of any desirable end."

Dr. Davey, of North Woods, Bristol, says:—"There must be no mechanical restraint, nor perpetual seclusion in an isolated apartment, to take the place of that kind and discriminate care and attention so indispensable to the relief or care of him mentally afflicted." He further adds:—"There are few, indeed, among the insane, who are wholly lost to the higher and purer feelings of our nature, whose affections are, one and all, blighted and perverted, or whose emotions are quite gone astray, and altogether beyond restoration and repair; the

fact will supply the superintendent with the requisite data as to the treatment."

Having made the preceding just remarks, how could he commit himself by making the following observation:—"One remark I would venture to make, viz., *that there must be, as a rule, no positive indulgence shown towards the insane.* Whatever may be the nature of the caprice or irregularity which pervades the mind of a patient, in what way soever his perverted feelings and desires may be manifested, however much or little his emotions may be disordered, it is the duty of the physician to strive to amend the indications of disease in him, and not to humour the various backslidings of his mental nature."

If, as he asserts, there are "few indeed among the insane who are lost to the higher and purer feelings of our nature," &c., surely Dr. Davey must meet with many cases in his practice, in the treatment of which it would not only be *necessary*, but *humane*, to bring them within the range of "positive indulgences."

Mr. R. G. Hill, of Lincoln, says:—"Perfect "non-restraint is practicable, for it has been well tested; it is humane, as all must acknowledge; it contributes to the comfort, the cheerfulness, and the recovery of the insane. It is also safe, for no serious or fatal accident has occurred in consequence of it. Constant surveillance has prevented this; it soothes the patient, keeps his angry and revengeful passions at rest, gives him the power to assist himself, and thereby prevents his falling into habits of hopeless filth and misery; and I venture to pronounce of it, that it is the system which must and will ultimately prevail in every asylum."

Mr. Hugo, of Long Ashton, Bristol, has had no occasion to use restraint or seclusion during the few weeks he has had the management of that asylum.

Mr. Scrase, of Lewes, says:—"I am quite convinced that the non-restraint system is the preferable treatment; and I do not intend to have recourse to restraint again, believing that it may be entirely dispensed with."

Mr. Berrow, of Duddeston Hall, near Birmingham. This gentleman says:—"I have, during the last four years, been enabled to bear testimony to the great advantages arising from the abolition of mechanical restraint, with a full assurance that such measures greatly improve the condition, health, and comfort of the insane."

Dr. Finch, of Fisherton House Asylum, says:—"The system of treatment pursued in this asylum for the insane is, upon the admission of a patient, to remove all mechanical restraint from his person, and at once to let him have as much personal freedom, in-doors and out, within the precincts of the establishment, as the nature of the case will permit, with a due regard to his own safety and that of others."

Dr. Laycock, of York, in an interesting report, advocates non-restraint. He says that, "The non-restraint system of treating the maniacally-violent should be founded wholly in the psychology of the instincts and emotions. As to the use of persons or of mechanical appliances, when physical force is absolutely necessary (and such cases must inevitably occur), my experience is in favour of the latter. Personal restraint in the sane excites resistance, and the desire to attack the restrainer; how much more in the insane, in whom the disposition to attack and resist is morbidly developed already! The manner and expression of the attendant during the struggle with the maniac must also act as a powerful stimulus; for philosophy and experience convince us that he cannot remain perfectly free from emotion, when his corporeal energies are called forth to resist the struggles of a violent maniac, however well disciplined, so potent and ever active are the stimuli to these instinctive emotions and passions."

We now proceed to give a *resumé* of the evidence in favour of a qualified application of mechanical *restraint* in the treatment in peculiar and special cases of insanity.

Messrs. J. Harris and B. F. Mathews, of the Bedford Asylum, observe:—"We believe the objection to restraint is not well founded, but arises from the abuse, and not the proper use of it; and that the evils incident to the so-called 'Non-restraint' system, are greater than those attached to the treatment we advocate."

Dr. J. C. Bucknill, of the Devon County Asylum, who has returned an able and full report to the circular of the Commissioners, makes the following important admission:—"In the Devon County Asylum, restraint is never employed, except in surgical cases; in these, of course, the same principles must be adopted for the insane as are necessary for the sane, to insure that absolute quietude of parts which is essential for the advantageous conduct of the healing process. It is not denied that cases have occasionally arisen in which it has been difficult in the extreme to avoid the imposition of restraint; for instance, those of suicidal patients who have endeavoured to effect their purpose by thrusting articles of clothing and other substances down the throat, by beating the head against the wall, and by other means, which are scarcely capable of being obviated by any watchfulness on the part of the attendants. A patient is still resident in this asylum, who endeavoured to commit suicide by lacerating the veins of the fore-arm with his teeth, and who bit out from his arm large pieces of flesh in the attempt. Had these efforts continued, it would not have been possible to have avoided the imposition of restraint, except by defending the arm by hard leather sleeves; by restraining the teeth, in fact, instead of the limbs. The occurrence of such cases, however unfrequent they

may be, renders it impossible to deny that the imposition of mechanical restraint may, in rare instances, be necessary for the safety of the patient."

Whilst admitting that mechanical restraint *is necessary*, he makes the following startling assertion:—"Mechanical restraint in the treatment of the insane is, like the actual cautery in the treatment of wounds, a barbarous remedy, which has become obsolete from the introduction of more skilful and humane methods, but which may still be called for in exceptional and desperate cases. It may be said that as these cases are so rare, that as large asylums are conducted for many years without one of them being met with, that as they do not appear, they may be considered as if they did not exist."

It occurs to us, that if mechanical restraint be, as Dr. Bucknill describes, a "barbarous remedy," assimilated to "actual cautery" in its operations, it is not justifiable, under any possible state of circumstances, not even in the surgical and suicidal cases referred to by this able physician as illustrations of the propriety of restraint in certain cases of insanity. We direct particular observation to the following sensible remarks:—"The lunatic is unable, without assistance, to control his actions so that they may tend to his own well-being, and to that of society. He is therefore placed under care and treatment, that he may be restored to the power of self-control; under care, that while this power remains impaired he may be assisted in its exercise. This assistance may come in the shape of a strait-waistcoat, or in the fear of one: or it may come in the sense of duty imposed in the operation of a gentle but effective discipline, of honest pride, desire of approbation or personal regard, or the still nobler sentiments of religion. The first motive, that of fear, belongs to man and the animals, and its exercise is degrading and brutalizing; the latter motives are humane and humanising in their influence, and their development is the true touchstone of progress in the moral treatment of mental disease. It was the brutalizing influence of fear, and the degrading sense of shame, which constituted the true *virus* of mechanical restraints. In repudiating the use of mechanical restraints in the Devon Asylum, the above principle has been kept in view with a jealous anxiety lest the moral effects of restraint should present themselves in some other form. It would seem that it is more easy, or at least more consistent with our nature, to rule by fear than by love. And the annoyances caused by the insane, on their immediate attendants, are hard to be endured without exciting a spirit of retaliation. For this reason the plan of manutention, or holding violent patients for a long time by the hands of attendants, scarcely deserved the name of a reform; and seclusion, injudiciously and harshly employed, is liable to the same objection. If a patient is to be ignominiously thrust into a dark and comfortless

cell, and detained there for an indefinite period on the occasion of any outburst of temper or irritability, it may well be doubted whether mechanical restraint does not possess some advantages over such a system ; and the French physicians may be perfectly justified in preferring the *gilet* to their own *cellules de force*. But in my opinion, seclusion differs widely from restraint in its capacity for beneficial employment ; restraint, except in cases so rare that they may be left out of consideration, is always an unmitigated evil. Seclusion, wisely employed, is frequently an important and valuable remedy. The character of seclusion, as a remedy, has never recovered from the attacks made upon it by the advocates of mechanical restraint. They represented, truly enough, that a patient walking about pleasure grounds, with his arms tied to his sides, was capable of more enjoyment than he would be if shut up in a dark and narrow cell, with all his limbs at liberty. In this objection, the fundamental principle of the new system was overlooked, that neither by restraint, seclusion, nor any other means, was it permissible to inflict upon the insane any unnecessary or avoidable suffering, or any indignity or degrading coercion, whether of a physical or moral kind. But the possible abuse of a thing is no valid argument against its use ; otherwise there is no important remedy, medical or moral, which might not be equally objected to."

Dr. Oliver, of the Salop Asylum, says :—" I have never had occasion to employ mechanical restraint in the treatment of the insane, and I have never seen such circumstances as would, in my opinion, justify recourse to such coercion in preference to the practice of seclusion."

After making this declaration, from which one would have imagined that he was an out-and-out advocate for the total abolition of mechanical restraint, he startles us with the following remarks :—" Certain circumstances, as for instance the obstinate refusal of a person to take food, may render it necessary to overcome this reluctance by means of mechanical compulsion, and by the use either of the stomach-pump, or of a flexible tube introduced through the nostril ; and it may be advisable to place the individual in such a position at the time of the operation, that he may, as little as possible, be able to make resistance ; but beyond this kind of necessity, I can see no good to come from directly restraining the action of the limbs."

We leave Dr. Oliver to reconcile, in a manner most consistent with his view of the question, this obvious discrepancy in his recorded opinion.

Dr. Wilkes, of the Stafford County Asylum, makes the following remarks :—" With every disposition to advocate the disuse of restraint to the utmost extent, I am compelled to admit that the result of my experience in this asylum, up to the present time, leads me to the con-

clusion, that cases may occur in which its temporary employment may be both necessary and justifiable. Besides the occasional use of some means of confining the hands when feeding patients by means of the stomach-pump, a more prolonged use of restraint was found necessary in two cases which occurred some years since. One of these was a man with so determined a suicidal disposition, that on more than one occasion he nearly effected his purpose by trying to beat his head and face against the walls, to throw himself from tables and chairs, and thrust spoons and other articles down his throat. When first admitted, he was not suspected of having any suicidal tendency, and for some weeks did not show any; as a matter of precaution, he slept in a padded room, and one night he so battered his head with a tin chamber utensil, that he was found nearly dead from loss of blood, and his life was subsequently in much danger from extensive sloughing of the scalp. In this case, it was absolutely necessary to confine the hands to keep any dressings on the head, and after the wounds had healed, and the confinement to the hands had been discontinued, he wore a thickly padded cap for many months. Several years after this, he bit both his little fingers off; and though the suicidal disposition has in a great measure subsided, he is still at times much excited, but does not require any restraint. The second case was one of acute mania in a powerful young man, who refused all food, under the impression that it was poisoned, and imagined that every one who went near him intended to murder him. Every inducement to get him to take food was in vain, and though a sufficient body of attendants under my own inspection attempted to do what was necessary for him, he became so much bruised with holding him in his struggles to assail the attendants, and it was so urgently requisite that food should be introduced into the stomach, that I decided upon confining his hands, and both food and medicine were then readily administered. The result certainly justified the means employed, as the excitement soon subsided, and he recovered rapidly."

In justice to Dr. Wilkes, we should observe—"These were extreme cases, and such as may not occur again for years; and although perhaps 999 cases may be safely dealt with without resorting to any mechanical restraint, still the next which offers may baffle the ingenuity of the greatest advocate of non-restraint, and be one in which the employment of some means of coercion cannot be avoided with due regard to the safety and well-being of the patient."

Mr. W. H. Parsey, of the Warwick County Asylum, says:—"Mechanical restraint has never yet been used in this asylum, nor are there on the premises any special means for applying it. My opinion, drawn from personal observation, is, that its application may always be done

without; that the cases in which a moderate amount of it might be beneficial are very rare, and that if used at all it should be in the mildest possible form: and only as an adjunct to the unremitting vigilance of attendants. Among the 258 cases that have been under treatment in the asylum, there is but one in which I think it might have been useful."

We hope this gentleman will not be offended at our placing him in the present class. Without any reference to the number of patients under care, if a superintendent acknowledges that he is obliged to use mechanical restraint even in one case, we consider ourselves justified in placing his name among the advocates for the partial application of restraint in special cases.

Dr. Thurnam, of the Wilts County Asylum, after stating that there is literally no instrument of coercion in the institution, observes that he "is not of opinion *that in no possible case is it justifiable or proper to have recourse to personal restraint*. There are, he believes, rare instances in which it may be needful temporarily to resort to it; in order, for example, to prevent the removal of surgical apparatus, or in some anomalous cases of perverted instinct, among which may be adduced that now and then observed, of the patient manifesting a determined propensity to gnaw his own flesh. Such instances are, however, truly exceptional; and the writer entertains a very strong conviction that the officers and attendants in an asylum should be trained to the habitual disuse of mechanical restraint, and that it should be on no account resorted to by the medical officer in charge, except upon very grave deliberation, and after the failure of all other methods."

Mr. S. Hill, of the Yorkshire, North and East Ridings' Asylum, thus describes his mode of restraint:—"A spencer, made of thick linen, to button or lace behind, with sleeves ending in pockets, which latter are sown to the lower and front part of the body of the spencer, answers very generally, and is in use in this asylum for both sexes, when all other means have failed to tranquillize dangerous, destructive, or suicidal patients."

Mr. T. Green, of the Birmingham Borough Asylum, says—"I have not used mechanical restraint at all, though I am not, with some, prepared to say that it is in all instances injurious. On the contrary, I think that there are cases in which its employment is not only justifiable, but beneficial."

Mr. Stainsbury, of the Bristol Lunatic Asylum, admits:—"The waistcoat and wrapper are sometimes used; the former for the most violent. We do not, in its use, allow the arms to be crossed on the body, as such constraint tends to congestions, but prefer allowing a certain amount of freedom to the arms by securing the sleeves to each

side of the bedstead when in the recumbent posture, which has proved to be equally safe, and must be far less irksome than crossing the arms on the body."

Mr. W. F. Casson, of the Hull Asylum, says, "that mechanical restraint and seclusion are both occasionally adopted; the former chiefly by means of a strong ticking or fustian dress, the sleeves of which are attached to the sides, the hands and arms being, as it were, in deep pockets. This method is employed when a constant tendency exists to destroy the clothing, &c., or to undress, employment failing to produce the desired effect. I am not an advocate for the total disuse of mechanical restraint and seclusion, having found them useful; both, however, are sparingly employed, the latter more frequently than the former."

Dr. Formby, of the Liverpool Lunatic Asylum, says:—"We are ready to employ mechanical restraint where it is necessary to promote the welfare of the patients, yet that such cases are extremely rare, and only allowable where other means fail to attain the desired object—viz., the care, comfort, and cure of the turbulent insane."

Mr. Gibson, of Bethel Hospital, Norwich, says:—"The rule of treatment is on the principle of non-restraint. But occasionally violent patients are prevented doing harm to themselves or others by a strap fastened round their waist or wrist, and are also secluded in their own rooms when very noisy. We have no padded rooms in the establishment; but mechanical restraint is quite the exception, and not the rule, here."

Mr. Allen, of Warneford Hospital, admits that he has used mechanical restraint in the treatment of his cases under the following circumstances:—"1. Female, one night only, to prevent her being utterly naked by the destruction of her night apparel and bed-clothes. 2. Female, once only for nine hours, to prevent violent attempts to injure herself in a paroxysm of acute mania. 3. Male, once only for two hours, for repeatedly tearing his own clothes to pieces. Five patients have been placed in seclusion for short periods:—1. Male, twice, for mischievous destruction of everything within his reach. 2. Male, once for incessant shouting and blasphemous swearing. 3. Male, once, for extreme violence and assault. 4. Male once, for the same. 5. Female, occasionally, for the habitual use of indecent and disgusting language."

Dr. Edward Simpson, of the York Hospital, admits that he has adopted a mild form of mechanical restraint in rare and exceptional cases.

Mr. Kitching, of the Friends' Retreat, York, says that the asylum, under his care, "has not considered it wise to pledge itself to the non-restraint practice as a principle, conceiving that there may still be

exceptional cases in which mild restraint is the best and kindest, as well as the most scientific mode of dealing with them."

Mr. James Phillips, of Bethnal House, says:—"Mechanical restraint is never employed with the idea of diminishing excitement, or as a precaution against violence or suicide; never as a mere punishment, or with the purpose of saving trouble to the attendants, by diminishing their vigilance, or to render their persevering efforts of persuasion and kindness less necessary. I am not one of those who have convinced themselves that, in the practical treatment of insanity, it can be entirely disused."

Mr. McClure, of Earl's Court House, uses mechanical restraint "in extreme cases of maniacal violence, where the patient is quite incoherent, and where I considered the patient in danger of sinking from the exhaustion brought on by the violence."

Mr. Roy, of Hammersmith, says:—"More than one case has come under my notice, when, from the patient constantly getting out of bed at night, sleep could only be procured when restraint was used."

Mr. Paul, of Camberwell House, has used mechanical restraint in one case:—"The patient to whom the camisole was applied was a female labouring under a violent paroxysm of maniacal excitement, in which a suicidal propensity was strongly marked, the attempts at self-destruction being of an unusually sudden and dangerous character, and the severity of the symptoms being obviously increased by the presence of attendants."

Dr. Sutherland says, he agrees with Dr. Conolly, "that restraint cannot be dispensed with in all cases, and under all circumstances, with benefit to the patient."

Mr. Bush, of Clapham, says:—"My own observations lead me to believe that there are cases in which the application of the waistcoat is unmistakably beneficial and curative in its effects, inducing sleep where other means have failed; and also in some cases, where sudden and furious paroxysms show themselves, I consider it less hazardous to the patient than prolonged struggling with attendants."

Dr. Monro is an advocate for the use of mechanical restraint, and has used it "in the cases of a few female patients more especially, and with a view to the prevention of violent outbreaks or mischievous conduct. These instances, however, have been of short duration, and their object simply the prevention of injury to themselves or others."

Messrs. Bowling and Halford, of Normand House, admit to have used mechanical restraint in the case of a patient who "is exceedingly dangerous, filthy, and indecent. She is kept in a room by herself, with a small portion of the garden railed off for her use. The only restraint used is the occasional muffling of the hands and confinement

of the arms, to prevent her picking up and swallowing stones, broken glass," &c.

Dr. Oxley, of Hackney, says :—" In some cases, however, it has been necessary to have recourse to restraint, and I have found it beneficial in aiding medical treatment."

Dr. Forbes Winslow says :—" Mechanical restraint is rarely resorted to in the establishments under my management, except when its application is rendered absolutely necessary for the protection of human life, and the prevention of habits subversive of health, and obviously inimical to recovery. For many years, the strait-waistcoat has not, excepting in one or two cases, presenting peculiar and anomalous features, been used in either of the asylums under my care." He then cites a case in illustration, and observes :—" In this, as in every other case, no servant of the establishment has the power of applying any kind of mechanical restraint without the sanction of myself or my assistant medical officer." He subsequently states that, "as a curative process of treatment, gentle and modified mechanical restraint is occasionally beneficial. I have no hesitation in recording this to be my deliberately formed opinion. Patients have often expressed a wish to be placed under mechanical restraint, should I, in my judgment, believe that they would, when much excited, commit overt acts of violence, and be dangerous to themselves and others. In cases like these, mechanical restraint may, for a short period, be applied, not only without detriment, but with positive advantage as a curative process. Several instances illustrative of this fact have come under my observation. I have seen cases in which no food or medicine could be administered without subjecting the patient to restraint. In these cases, if all idea of cure had been abandoned, and I could have reconciled it to my conscience to allow the disease to take its uninterrupted course, and have permitted the patient to exist upon the minimum amount of nutriment, and take no medicine, all restraint might easily have been dispensed with; but considering the cure of my patient paramount to every other consideration, I had no hesitation as to the humane and right mode of procedure. Whilst recording these particulars, conclusively demonstrative, according to my humble judgment, of the propriety and necessity of mechanical restraint, under peculiar and pressing circumstances, I wish the Commissioners in Lunacy distinctly to understand that I have no hesitation in admitting that, as a general principle in treating the insane, mechanical restraint and prolonged seclusion should undoubtedly be dispensed with. In the management of the insane, and in the conduct of asylums, both public and private, the principle of treatment should consist in a full and liberal recognition of the importance of extending to the insane the maximum amount of liberty

and indulgence compatible with their safety, security, and recovery ; at the same time, subjecting them to the minimum degree of mechanical and moral restraint, isolation, seclusion, and surveillance, consistent with their actual morbid state of mind at the time. It is also necessary to bear in mind as an essential principle of curative treatment, the importance of bringing the insane confined in asylums, as much as possible, within the sphere of social, kindly, and domestic influences. In many cases, isolation, seclusion, and an absolute immunity from all kinds of stimuli, physical and mental, are, during the acute and recent stages of insanity, indispensably necessary to recovery ; but in certain forms of melancholia, monomania, and in some chronic morbid states of mind, no mode of moral treatment is productive of such great curative results as that now referred to. I need not observe, that this system of treatment cannot be adopted except in those establishments where there is an active, experienced, and intelligent resident medical officer, who fully appreciates the great value of such homely family influences upon the minds of the insane. In our moral treatment, do we not occasionally exhibit an excess of caution, and exercise, with the best and kindest intentions, an undue amount of moral restraint and vigilance ? I think we may sometimes err in being a little too distrustful of the insane. Whilst urging the necessity, in certain forms of morbid mind, of great and constant watchfulness, particularly in cases of suicidal monomania, and recent and acute attacks, I would suggest, to those having the management of asylums, the necessity, with the view to the adoption of a curative process of treatment, of placing more confidence in those entrusted to their care, and of allowing the patients a greater amount of freedom, indulgence, and liberty than they at present enjoy in many of our public and private asylums. In many phases of insanity in which confinement is indispensable, the patient's word may fully be relied upon ; and under certain well-defined restrictions, he should be permitted to feel that confidence is reposed in him, and that he is trusted, and not altogether (although in confinement) deprived of his free and independent agency. I feel quite assured that a judicious liberality of this kind will be generally followed by the happiest curative results, and greatly conduce to the comfort and happiness of the patient. Patients should be permitted occasionally to attend divine worship out of the asylum, when circumstances do not contra-indicate this practice ; they should be allowed also to walk out of the confines of the asylum, to attend places of amusement, visit scientific exhibitions ; and the resident medical officer should make himself their friend and companion ; thus inspiring them with confidence in his skill and kindly intentions, and reconciling them to the degree of moral restraint to which they may be unavoidably subjected."

Mr. Nicoll, of Hanwell, without denying that mechanical restraint is necessary, says it "is very rarely called for, and that seclusion is seldom necessary."

Mr. J. W. Holgate, of Hendon House, Middlesex, says:—"In two cases of maniacal paroxysm, it was found necessary to control the patients very temporarily, by means of a long-sleeved vest; a course, I conceive, more humane and preferable to a resort to the padded room (particularly in cunning and suicidal patients); patients can be more readily fed, an all-important matter; medical means, &c., more readily applied, as cold lotions to the head, &c.; and the patient's habits do not necessarily degenerate to those of the mere animal; and I may further add, that by occasional judicious mechanical restraint, the patients are less irritated and less likely to be injured; the attendants, also, are less likely to be worn out and exhausted."

Dr. Armstrong, of Peckham, says:—"Restraint is but seldom used now in this asylum: nevertheless I am of opinion that there are some cases where the application of restraint is essential for the well-being of the patient; but such cases are of rare occurrence."

Dr. Atkins, of Stoke Newington, says that—"Some instances have occurred in which I have deemed it advisable and even necessary to have recourse to mechanical restraint. Cases have occurred in which patients would have been in a state of nudity from various causes (more particularly from the occasional practice of destroying their clothing), but for the use of some prohibitory measure, such as the jacket or gloves."

Mr. W. T. Spencer, of Stoke Newington, says that "mechanical restraint has been, and is being, considerably diminished, but notwithstanding every effort and desire to effect its total abolition, it is in some cases found to be impracticable."

Mr. Glenton, of Bensham Asylum, speaking of mechanical restraint, says:—"Exceptional cases occur in which it is very difficult and even dangerous to dispense with it. I may cite the case of J. S.; he is subject to very violent paroxysms of epilepsy; immediately after the fit he becomes homicidal, and being a strong and extremely muscular young man, no single attendant can cope with him, or restrain him from doing that which might have a fatal issue. My predecessor nearly lost his life during one of these paroxysms. He fastened on his throat with both hands, and but for timely aid he would have perished. I have myself seen him attack an attendant in the same manner. In such a case I think coercion is unavoidable; it would require the constant attendance of two men to prevent fatal consequences, and also to have two separate entrances to the room where he is placed; there is besides the risk of injuries during a struggle."

Mr. Dairs, of Wreckenton, observes—"I am inclined to believe that mechanical restraint can scarcely be entirely and unreservedly abolished, for cases frequently occur, where a certain degree of restraint to prevent the patient injuring himself, or those around, is unavoidable; and I am induced to consider restraint by mechanical means more effectual and less irritating to the feelings, as well as more easily and readily obtainable, than any other."

Dr. Barkus, of Gateshead, says that—"In some cases, when the patient is very violent to himself and others, he is placed in the strong-room for a short period; if he tears his clothes, or strips himself naked when other measures are of no avail, handcuffs are used. These methods are generally effectual for the purposes aimed at."

Dr. Griesbach, of Dunston, has "found it necessary to apply restraint in two or three instances, to prevent the patients inflicting injuries on themselves. In each case, the method of restraint has been by a light strait-waistcoat, loosely applied, so as not to interfere with respiration, or cause the slightest pain; and in those patients of destructive habits, we have substituted the ordinary blankets, stoutly bound at the edges with jean or bedticking, and also their personal clothing is now made with stouter material than those patients who are not so destructive. These means we have invariably found to supersede the necessity for restraint."

Mr. Tomkin, of Witham, uses mechanical restraint in cases of "acute mania, strong suicidal tendency, showing great violence to others, breaking windows, a constant habit of tearing clothes, and burning them, &c."

Mr. Cornwall, of Fairford, says that he would not again resort to mechanical restraint, "unless under the most pressing emergency."

Dr. C. M. Burnett, of Alton, says:—"On the subject of mechanical restraint, I am still of the same opinion I expressed in 1848; viz., that as a remedial means it has its use, like all other means, which cannot either with safety or advantage be put aside; and it would be a parallel piece of wisdom to denounce the hygienic or the therapeutic treatment of the insane, simply because it is possible to fall into grave abuses in the employment of such means. I do not think this fact has been put candidly and dispassionately forward by writers, who say that it is possible to treat the insane entirely without mechanical restraint. They deceive themselves by supposing that the principle of mechanical restraint is done away with, simply because it has been transferred from the person of the lunatic to the building or room in which he is confined. The question at issue does not involve the principle, and is simply one of degree. And upon this point, I am quite decided that the necessity for resorting to mechanical personal restraint is by no

means so great as was formerly supposed to be necessary, or really was necessary; and several circumstances conspire to effect this; but three may be particularly named:—1st. The more frequent residence of a medical superintendent, and, consequently, the more complete supervision in asylums; 2d. The improved condition of the attendants; and 3d. The improvement in the general treatment of the insane.”

Mr. Millard uses mechanical restraint in extreme cases as follows:—
 “1. That of furious mania, where the patient strikes and bruises his own body. 2. In a case of pernicious practices, which are humiliating and degrading, and a hidden source of insanity, more frequent than is supposed. 3. In a case of one who feeds on disgusting matter, which destroys life. 4. In a case where a patient refuses to take food and his life is endangered by starvation, and you cannot feed him (on account of his resistance) without mechanical restraint.”

Mr. Smith, of Hadham:—“In cases of violence mechanical restraint would be resorted to, in the strong and conscientious conviction that it is most humane, and by far the most beneficial.”

Mr. Young says he adopts non-restraint so far as he believes it possible to do so in a small private asylum.

Mr. Ainsworth considers it necessary to use restraint, he says:—
 “Some of the patients are so violent and unmanageable as to render this, in some instances, at times absolutely necessary, both on account of their own safety and comfort, as well as for the safety of those about them.”

Dr. Noble, of Manchester, is “decidedly of opinion that, in certain cases, some humane contrivance for mechanical restraint is preferable to a struggle between patient and attendant. The latter proceeding, I am led to think, irritates and excites by the sense of personal antagonism which it creates. In the very few cases in which I have seen employed the mild system of physical coercion described, I have not observed the production of any injurious sense of humiliation or degradation.”

Mr. Whitehead, of Warrington, observes—“Mechanical restraint and seclusion are seldom employed, and where it has been the case that either one or the other has been adopted, it has been with the view of preventing the patient from injuring himself, where other means have been tried and failed, or as a means of keeping him in bed, and so give him the benefit of a few hours’ rest; for I consider that restraint, judiciously employed, acts as an anodyne, and proves a source of great comfort to the patient. It is not the use of anything which makes it objectionable, but its abuse. The gloves are the only restraint used here.”

Dr. F. Willis, of Shillingthorpe House, says:—“From my own experience, and that of my predecessors, who were most successful in their

treatment, I consider mechanical restraint in the feverish stage of the disorder, when a patient, through his fever and restlessness, cannot govern himself, a most merciful and beneficial means of cure, combined of course with medicines calculated to remove these symptoms."

Mr. Landor, of Heigham, Norwich, says:—"Restraint and seclusion are both nearly abolished; of the first, there has been only one instance in this house for four years, and there is a general opinion that seclusion and padded rooms are needless. Air and exercise are constantly required, and are the most useful parts of treatment: occupation is most desirable, but is the most difficult to obtain in private asylums, because the class of people in them is one unused to manual labour, and to whom any active bodily useful occupation is repugnant."

At Heigham Hall, Norwich, under the joint care of Mr. Nicholls, Dr. Ranking, and Mr. Watson, mechanical restraint is resorted to in the treatment of certain forms of insanity. These gentlemen observe—"With reference to the mooted question of the total abolition of personal mechanical restraint, we beg to state that we acknowledge to the fullest extent the advantages, as well as the moral obligation, to dispense with the frequent recourse to restraint of any kind. At the same time, we regard the entire and unconditional abolition of simple mechanical restraint as a piece of psychological quackery, well adapted to catch the unreflecting sentimentality of the vulgar, but rarely, we have reason to believe, carried out to its fullest extent even by its warmest advocates. The occasional use of the muff we regard as indispensable in certain cases, and we think it at all times merciful in comparison with the horrors, physical and psychological, of a padded room, where the patient is left to himself for hours, and alone. At the same time that we sanction the occasional use of such means of restraint as the muff and waist-belt, we most distinctly pronounce that it is not with the object of economising attendants, but from a conviction that it is for the advantage of the patient. We have, in fact, yet to learn that such restraint of a violent patient is more irritating to him than the continual jostling and struggling with two or three attendants. There can be no comparison in its moral effect; the first method gives cause for violence and irritation to both patient and attendants; the other satisfies the patient that, however much he may object to it, there is an authority superior to his own, and that he must learn obedience and self-control. We must again repeat that it is upon principle, and not for mere convenience, that we continue to employ a certain amount of carefully applied mechanical restraint."

Dr. Mackintosh, of Newcastle-upon-Tyne Asylum, admits that "instances do occur, wherein mechanical restraint becomes a necessary and salutary agent of cure. I am of opinion, after a practical and almost

daily observation of above 20 years' residence in an asylum, that the non-restraint system has many decided advantages; but it has a limit beyond which it is dangerous to go; and cases do occur wherein mechanical restraint really proves salutary, and is the only means of relieving the system and preserving life. I look on the non-restraint system as generally sound and practicable, but the total disuse of it I consider as unsound, and sometimes fatal in practice. The abuse of restraint all rational men must condemn, but on that account to fly to an opposite and most dangerous extreme, from fear of doing one's duty, or to establish a principle, is what no honourable mind would sanction or encourage."

Mr. Mallam, of Hooknorton, in speaking of restraint, says that "there are cases in which it is necessary for the benefit of the patient, and the safety of those who have the charge of him."

Mr. Norton, of Tenby, says:—"As to restraint, it is both unnecessary and hurtful in all cases except in acute mania, where I feel convinced it is in some cases, and at certain times, absolutely indispensable; thus in cases where patients will sit up all night tearing their bed-clothes, bedaubing themselves and apartment with excrement and the like, they are better-invested with a garment which prohibits the use of the hands; they will the sooner lie down, and sleep overcome them, than if allowed to irritate themselves by tearing and knocking about all night. In short, with careful and kind conduct on the part of attendants, not one case in 100 requires restraint in the day-time."

Drs. Francis and Charles Fox, of Brislington House, Bristol, speak as follows on the subject of restraint:—"The average number of patients in the Asylum for each week has been 86. The average number under seclusion for each week has been 2. The average number under restraint for each week has been 2. We must observe that the cases of seclusion and restraint were generally only for short periods during the day. We are of opinion that any system professing to reject all mechanical restraint in the treatment of insanity, would be injurious to the insane; but we think it right that satisfactory reasons are required to be entered in the weekly reports whenever occasion for such restraint arises. With respect to seclusion, instances so often occur when the removal of a patient to a separate room will tranquillise excitement in the case itself, whilst it contributes to the comfort of the rest of the community, and the measure itself is often so acceptable to the patient, that we consider it should not in such cases form an entry in the weekly report, but merely be recorded in the patients' case-book. We believe that the same moral, physical, and other causes which have gradually induced a more asthenic type in bodily diseases, may have effected a similar change in cerebral disorders, and that from hence in

part results the less frequent occurrence of high maniacal excitement; but we also ascribe much of this mitigation to the more enlightened principles of treatment which have been adopted. We consider that the regulations by which a community of insane persons is conducted, should be assimilated in a great measure to those of other associated bodies. The recognition by the insane of an authority to which they must defer, with the knowledge that they have a power of appeal against an undue exercise of it, is of much value, the maintenance of civilized habits, out and in-door pursuits adapted to the tastes of each individual; social intercourse with the medical superintendents, their families, and the chaplain, and especially a regular participation in the observances of religion, afforded by the daily public ministrations of a chaplain, form the basis of the system of moral management adopted by us. We attach a high value, even in incurable cases, to the consoling and restraining influence of religion."

Mr. Terry, of Bailbrook House, Bath Easton, says:—"We do not profess to have entirely abandoned the use of mechanical restraint; we have always considered it as a remedial measure, to be applied solely by medical order; but we employ it only in those cases in which some manual coercion would otherwise be necessary, such as where a sudden and violent desire for self-destruction occurs in paroxysms. In such cases, I believe that some light form of mechanical confinement is less irritating to the patient, and much more safe than forcible restraint by the hands of attendants, however imposed."

Mr. Gillett, of Taunton, although he rarely uses restraint, observes that—"Cases, however, occur at times in which, in my opinion, it is advisable to have recourse to it, and these are where the patients will expose the person, and, unless prevented, will not keep on any clothes; others, where the patient is wilfully destructive, and is determined to do mischief either to himself or to those about him. Restraint, however, should only be resorted to when other means fail, and this in cases of extreme necessity."

Mr. Woody, of Tamworth, employs mechanical restraint "only in cases of acute mania, and only in those cases in which danger of injury is apprehended to the patient himself. Such restraint has always been limited to the use of a strait-waistcoat, but never resorted to when the watchfulness and care of one or more attendants has been thought sufficient to protect the patients themselves from injury."

Messrs. Furnival and Charles Summers, of Great Foster House, Egham, say that for many years they have not employed mechanical restraint, "unless in strongly suicidal and violent cases, and where the patients would otherwise injure themselves. We have at this time

but one patient who is subjected to restraint, and that is always of the simplest and mildest kind; viz., the hands confined with the muffs or gloves, at night only, to prevent her from tearing her dress or bed-clothes, or doing injury to herself."

Mr. Stedman, of Guildford, is occasionally obliged to use mechanical restraint, and Mr. George Stillwell, of Epsom, says that he has not used restraint, "except in two severe cases of acute mania, when a linen waistcoat was employed, as medical means, to prevent and restrain the violence of the paroxysms."

Messrs. Newingtons, of Ticehurst, Sussex, say that:—"Occasionally a patient is admitted in a maniacal state, when the loose camisole, with long sleeves, is placed on him, until the violence has subsided; and we find it a more harmless mode of securing him from injury than the mechanical restraint of men's hands. Such cases are necessarily rare in a private asylum; this violent stage of mania belonging rather to the acute form of encephalitis, and being usually treated in private until the more permanent symptoms of insanity have indicated themselves. There is one class of patients with whom, contrary to our general rule, and more especially of late years, we have adopted a system of mechanical restraint; and we believe that, in these cases, beneficial results have been derived. They are cases of pernicious practices, which no amount of watchfulness can prevent. The wrists are fastened by a soft strap to the sides of the bedstead. As a general rule, we have found, that where mechanical restraint is absolutely necessary, the habit which called for it has shortly ceased when the patient has found that a restraint is placed on his actions. The result of our observations and experience at Ticehurst is, that it is impossible to establish a fixed rule, forbidding all mechanical restraint; but it will be seen by the foregoing remarks, that very much is to be effected without resorting to such measures, provided the number of attendants is ample. A patient, cheerful, and respectful behaviour on the part of an attendant, indulgence towards harmless caprices, but steadiness in not permitting what would prove injurious; change of attendant, where an obvious antipathy has arisen, and various forms of moral control, will often accomplish what no amount of mechanical restraint will effect, by calming a violent patient, and thus promoting his chance of recovery, while at the same time he is equally secure from mischief."

Mr. Bodington, of Driffold Asylum, remarks:—"That the theory of total non-restraint, so loudly proclaimed and upheld by some practitioners, has resulted, on the whole, in much advantage in the treatment and cure of lunacy, there can be no doubt; but, like all imperfect theories, when carried into practice, the good effected has not been

unaccompanied with serious concomitant evils, plainly pointing to a modification of the system as the best for general adoption. Properly modified and regulated, the abuses which formerly existed under the restraint system may be for the most part swept away; and at the same time the dangers and difficulties arising from the total absence of all restraint at all times unexceptionably, may be avoided. I cannot but consider the doctrine of total non-restraint to be an ultraism which overshoots the mark, and goes beyond the truth. It becomes, then, a question as to the best method of meeting, resisting, and overcoming the propensity to attack and destroy, which commonly appertains to mental derangement, and which, under certain forms of the malady, in some way or other displays itself. I have no hesitation in declaring my entire conviction that the use (taking care that there should be no abuse) of instruments of restraint, properly adapted, is the most efficacious and merciful way of meeting the difficulty. I hold the clamour, the agitation, or the remonstrances against instrumental restraint to be good and tenable only as against the abuses of it, and that when carried so far as to overturn the use of that system, they tend to substitute other abuses for those they would remove. There are the cases of the lunatics who will not keep their beds, but will be up even all through the night, and in severe frosty weather are in danger of being frost-bitten. No personal efforts of an attendant can be effectual in remedying this evil. The system of total non-restraint leaves these cases quite unprovided for. It is impossible to meet them otherwise than by a mild and judicious application of instrumental restraint."

Mr. Warwick, of Laverstock House, near Salisbury, says:—"As I consider the milder forms of mechanical restraint to be of service in some cases of insanity, I still occasionally employ them. I advocate plenty of exercise in the open air, out-door games, walks in the grounds, rambles about the surrounding country. I promote the breeding and keeping of domestic animals by patients; and also the cultivation of flowers; I encourage music, singing, drawing, painting, fancy works, and the usual recreations. Billiards, chess, backgammon, cards, reading, &c."

Dr. Nash, of Kingsdown House, Box, says, that "mechanical restraint is very rarely used in my establishment. I have found it necessary on a few occasions, in extremely violent and dangerous cases, to use a waistcoat until the violence of the paroxysm had subsided, but have never continued it longer than absolutely necessary for the safety of the patient or others, as the case might be. I have always tried gentle means in the management of the insane, and feel sure much

more may be done with kindness than in any other way, except in very violent and dangerous cases."

Mr. Anningson, of Kingston-upon-Hull, relates the case of one lady who, "with but few intervals, was obliged to be kept constantly under restraint, in consequence of her determined violence and destructive habits, until the 31st of August, 1853, when she was removed to another establishment. Since that time, no patient has been subjected to either restraint or seclusion."

Dr. P. Smith, near Leeds, says that:—"Exceptional cases of mania exist where the use of mechanical restraint for a short period is followed by the most beneficial effects, where the patient, possessing a certain control over his actions, is yet deficient in the wish to exert it. In these cases, a short period of 'duresse' excites the dormant power of self-control, as a prevention of further restraint."

Mr. Allis, of Fern Hall, near York, remarks, after referring to some cases in which he has used restraint, that he has "no hesitation in saying that the employment of such restraint was beneficial to the patient. One of the cases is now in the house, and the use of such restraint has never for a moment interfered with the kind feelings which have always subsisted between the patient and the managers of the institution."

Mr. Metcalfe, near York, states that he would not have recourse to mechanical restraint "for any case of mischief, only where danger to the patient or others exists, and this of extreme nature; were it used, the medical treatment would not be more carefully weighed; and I should, as hitherto, only use it myself, keeping the means as the drugs are kept, and classing them as aids with any nauseous medicine, or powerful remedy, not to be trusted in unskilled hands."

Mr. Nelson, near York, declares that he is "an advocate of mechanical restraint, and considers it, when properly used, a powerful remedial agent; it is a promotive of comfort to the patient, a preventive of suicide and injury to others, and an adjuvant to medicinal treatment in procuring quiet, and consequently sleep, and I am borne out by the testimony of some of the patients after recovery. One (a case of acute mania) stated that he could not sleep, except when restrained; another (a case of intermittent mania) was so conscious of the comfort, that he wished to be restrained at the approach of the fits."

Mr. Atkinson, of Heworth Asylum, near York, says that he has entirely abandoned restraint, "except in one single instance, the case of a female, who was very destructive during the night. A single light glove put on the right hand had the effect of preventing her from destroying her clothes. As to seclusion, I have never employed

or tried it, in any case at Heworth. When very violent, I have had recourse to a few doses of Ant. Tart., which I have invariably found serviceable."

A number of gentlemen assume the title of advocates for non-mechanical restraint, but who consider it necessary to forcibly confine the limbs of patients in certain surgical cases.

Dr. Robert Boyd, of the Somerset Asylum, says:—"In reply to your question of mechanical restraint, I beg to state that nothing has ever been provided or used for that purpose in this institution. In the last five years there have been six or seven cases, chiefly under surgical treatment, in which it was essential to prevent the patients removing the dressings; and the wrist was accordingly, so far as necessary, confined by a handkerchief."

Dr. Harrington Tuke, of Manor House, Chiswick, admits that he has been obliged to use mechanical restraint. In this case he says:—"I employed restraint for a few nights with most satisfactory results; but I had recourse to it with great reluctance, and only after frequent consultations with the friends and former medical attendant of the patient. I do not often use the padded room, and never in melancholia or suicidal mania."

Dr. Conolly has recorded his experience at some length, and although of course it is well-known what his views are on the question of mechanical restraint, he nevertheless admits that he has found it necessary to use it in a few surgical cases. When speaking of the former condition of the asylums in this country, he says:—"The disuse of mechanical restraints of all kinds has been productive of an incalculable amount of advantage to the insane. The general tranquillity, comfort, and satisfaction visible in all well-conducted asylums, public and private, attest this in the strongest manner. Fewer accidents occur; revenge is seldom excited in the minds of the patients; scenes of violence are seldom or never witnessed; the patients manifest no terror, and, on recovery, retain no sense of degradation; often after leaving the asylum, coming to it again as voluntary visitors to associates and friends, of whose good offices they are fully sensible."

But we would ask Dr. Conolly, whether the great improvement that has taken place in the management of public and private asylums is not in *some measure* to be attributed to the more general prevalence of enlightened views with reference to the pathology and curability of insanity? We do not think it fair to ascribe the general amelioration that has taken place in the condition of the insane *solely* to the inculcation of opinions adverse to the use of mechanical restraint.

Mr. Parsons, of Bristol, says that "mechanical restraint is never employed, except when it may become necessary in the course of sur-

gical treatment, to prevent, for instance, the forcible removal of dressings from a wound."

We proceed with our analysis of those who represent that mechanical restraint is not resorted to in the asylums under their management, but who express *no opinion* upon the abstract question. We can well understand that a medical superintendent of an asylum may be in a position to say, that no mechanical restraint is at the period of the making his return to the Commissioners used, but who nevertheless is of opinion, that cases do arise, for the safety and treatment of which it would be necessary. Dr. Begley, of Hamwell, says as follows:—"With reference to the disuse or employment of mechanical restraint and seclusion, I have to state, that the former has not been used in this asylum for several years, and that on the male side the latter is resorted to chiefly in cases of excitement premonitory of, or consequent upon, paroxysms of epilepsy. Seclusion is also occasionally employed in cases of recent, and in those of recurrent mania, usually, however, only for brief periods; exercise in the open air, with an attendant, sometimes with two (according to circumstances), being generally found efficacious in soothing such patients, and with the aid of medicinal and dietetic remedies, procuring refreshing sleep for them. In the irritability, too, manifested by persons affected with general paralysis in the last stage, and attended with much debility, it is customary, when the weather does not admit of their being drawn about the grounds in Bath chairs, to seclude these in padded rooms, for protection against injuries by falls, &c."

Mr. Stocker, of Guy's Hospital, says:—"All restraint has been removed (except restriction to the room of the patient on the occurrence of violent paroxysms of mania); and this liberty has been followed by most marked improvement in the general condition and conduct of the patients, many of whom, having previously conducted themselves with great violence, and contracted very offensive habits, have, since the adoption of the non-restraint system, been much more quiet, cleanly, and orderly."

Dr. Steward, of Southall, adopts the non-restraint system.

Dr. Wood, of Kensington, says that he has used no mechanical restraint since his connexion with this establishment, but he makes the following important admission, that "it is impossible to deny that, notwithstanding an increased number of attendants, casualties will occur more frequently where restraint is altogether disused."

Mr. Rumball, of St. Alban's, may be placed in this class.

Mr. Slatebrook, of Brook Villa, Liverpool, says,—“Since my appointment, there has not been any mechanical restraint. In some instances

we have tried half an hour or an hour's seclusion; in other instances, seclusion in the padded room. Seclusion has produced a good effect; it has calmed violence, changed the obstinate, silenced the noisy, soothed the irritable, and induced sleep in the restless; in some, the result has been such, that a mere reference to it has had the desired effect."

Mr. William Cooper, of the Norwich Infirmary, says:—"Every species of mechanical restraint is abolished, and recourse but rarely had to seclusion. When it becomes necessary to seclude, it is seldom needful to carry it beyond a few hours, and it is principally adopted where a patient requires to be removed as a means of protection to the others. The most refractory are sometimes removed to their dormitories for a short period, and this temporary banishment is found useful. The padded rooms with which the institution is provided are but seldom used, and only when the patient is uncontrollable by any moral agency. The class of patients most frequently subjected to this species of control are those who, when admitted, are in a state of furious mania; and much benefit is frequently derived by a short detention in this room: it removes them from all sources of external irritation, and except where fear is induced by it, which I have occasionally seen (especially with females), it operates in producing a calm and quiet most desirable of attainment. In the early stages of acute mania, rest and seclusion, removal from all excitement and from every predisposing cause, constitute the principal method of cure adopted."

Mr. Pritchard, of Northampton, does not find it necessary to use mechanical restraint in the treatment of his patients.

Mr. C. Williams, near York, says,—“There has been no mechanical restraint or seclusion employed since I have been in attendance,—viz., two months.”

Mr. Langworthy, of Plympton House, gives a qualified opinion on the subject, and says that, although he never uses mechanical restraint, “in some suicidal cases it may be desirable to do so, unless implicit confidence can be placed in the servants.”

We have now fairly laid before our readers an impartial summary of the opinions of some of the principal gentlemen engaged in the practice of lunacy in this country, on the subject of mechanical restraint. It is but right that we should state that many of the superintendents connected with several of our private and public asylums, have made no replies to the circular of the Commissioners; however, the evidence is considerable upon the point, and having given a digest of it, we leave our readers to form their own conclusions upon the important point to which it refers. The Commissioners in Lunacy still entertain the opinion that all mechanical restraint in the treatment of the insane

may eventually be done away with. It would appear that an influential body of men, practically engaged in the management of asylums think differently.

ART. VII.—RECENT TRIALS IN LUNACY.*

WE cannot permit our present number to be published without bringing specially under the notice of our readers three important trials, involving the plea of insanity in criminal and civil cases, that have occurred within a recent period. The two civil cases will no doubt be carefully read and well studied by all who take an interest in medico-legal questions. The criminal case has, from its peculiar associations, which it is unnecessary for us further to allude to, excited an unusual degree of professional and public interest, and has given rise to much animadversion and discussion in the public and medical journals of the day. This case will, from its peculiar features, take a prominent position among the *Causes Célèbres* of British Criminal Jurisprudence. We will proceed, in the first place, to the consideration of the two civil cases.

ROBERTS v. KERSLAKE.—In this case Elizabeth Roberts was the plaintiff, and Charles Edwin Kerslake, and Mary Ann, his wife, were the defendants. It was an issue from the Court of Chancery, in which the plaintiff affirmed that Henry Roberts duly made and executed his last will and testament on the 4th Dec. 1853, which was denied by the defendants. This case was tried at the Warwick Summer Assizes, before Mr. Baron Parke and a special jury, in August last. The facts of the case are briefly as follows:—Mr. Roberts, whose will was disputed on the ground of the insanity of the testator, had for many years carried on the business of a grocer and general dealer in the towns of Warwick and Leamington. In 1849 he retired from business, after having amassed a considerable fortune. He made his will entirely in favour of his wife, on the 4th Dec. 1853. He died on the 1st Feb. 1854. It appears that he had no other near relations, excepting a sister, who had married a gentleman of the name of Kerslake, who was heiress at law, and who now sought to dispute the will. Mr. Roberts married in 1835, and, according to the Attorney-General's statement, there had existed during their married life the greatest cordiality and affection. The question really at issue was, whether, on the 4th Dec.

* 1. Roberts v. Kerslake. Tried at the Summer Assizes, Warwick, 1854.

2. The Duke of Manchester v. Bennett. Tried at the Spring Assizes, Kingston, 1854.

3. Queen v. Brough. Tried at Guildford, August 9, 1854.

1853, the day upon which he made his will, he was of sound and disposing intellect.

The following evidence was laid before the jury on behalf of the plaintiff:—

Mr. Wm. Osborn had been mixed up with him in several public matters, and seen him frequently. He was a shrewd man, and always took care of his own interest. He was occasionally odd-tempered, passionate, and strange in his manner. Not more so of late, that he was aware of.

Mr. Wm. Satchell said Mr. Roberts was excitable, and liked to have his own way. Always thought him peculiar. Met him as late as October or November last, and *thought he saw a great change in his bodily condition. Saw no change in his mind. At public meetings he was loud and excited.* He became a candidate for Warwick in 1847, and had some small copper coins on which were struck the words, "Vote for Roberts."

Mr. David Johnson had met Mr. Roberts at the local Board. What he said was consistent, but his manner was inconsistent. What he said was very sensible. Never saw anything to the contrary of his being sane and rational. No change struck him in his general demeanour or conduct, public or private, up to the last time he saw him.

Mr. Joseph Fletcher had never perceived anything the matter with his mind. Had seen him excited.

Mr. Thomas Gibbs saw him on the 12th October. His understanding was very good. He was a good man of business.

Mr. Wm. Eyres last saw him on the 26th of October. Up to that time he had noticed no failure in his mind, but he became thinner. Considered he was a man of sound understanding.

Mr. H. Elliot Hoole had had business transactions with him. Received a visit from him in September, and paid him a visit in October. Did not observe much difference in his health in September. He had always been ill since he knew him. *He spoke to him about having put up for Warwick.*

Mr. Richard Archer Wallington: The first allusion made to the settlement of his affairs by Mr. Roberts was eighteen months previously. He said, if anything happened to him, he wished his wife to send for him immediately, as he wished him to have the arrangement of his affairs. Was in the habit of seeing him frequently. He said that his sister had influenced the father in making the will. Transacted business with Mr. Roberts on the 18th of November, 1853, and on Monday, the 28th November, and there was not the least failure in Mr. Roberts's mental capacity that he could discern. He had changed in bodily health twelve months previously. The following conversation took place at the interview on the 28th November:—"I said, 'Mr. Roberts, have you made your will?' He said, 'No; he thought of making one.' I then referred to the conversation eighteen months before, and told him it was useless to send for me, unless he had already prepared what is to be carried out. His reply was, 'I mean to come to you, and you shall make the will.' I said, 'How do you wish to

dispose of your property?' He said, 'I shall leave the whole to my wife; and those who are good to her, she can be good to them.' I said, 'This is a very simple affair, and you had better carry it out at once.' He said, 'I don't know about the witnesses; I don't wish it to be known I have made a will.' I said, 'You can come to our office, and either my partner or my clerk can witness it with me.' He said, 'That would not do; it would be talked of.' After further conversation, he said he thought Dr. Franklin would witness it. I said, 'You can't have a better man; let me speak to him about it.' He said, 'I will speak to him, and you can come up some time when he is here.' I said, 'Don't delay this matter, as you have made up your mind about it.' I then said, 'Are you aware that if anything were to happen to you, your wife would not have sixpence of your property?' He appeared astonished, and said the matter should be done." Was to speak to Dr. Franklin on the subject. On Thursday or Friday he saw Dr. Franklin, and asked if Roberts had spoken to him. Inquired of Dr. Franklin the state of Mr. Roberts's health, and in consequence of what Dr. Franklin said, he wrote to Mrs. Roberts to tell her Dr. Franklin's opinion, on the Thursday or Friday. Saw Mr. Roberts again on Friday, Dec. 2nd, at his house, on other business. Considered him worse in health, but he was quite rational in conversation. He saw him on *Sunday* morning, before church service. Conversed with him for five or six minutes, but did not speak to him on business. Showed not the slightest symptom of mental excitement; on the contrary, was then calmer than he had seen him for years. Was expecting to leave for London on the following morning, and in consequence of that, and what he heard from Dr. Franklin, he determined to call on Mr. Roberts again the same Sunday. Called about four o'clock, and he was then out for a walk, and came in by himself. *He was quite free from excitement in the afternoon*, but he appeared stronger, as if, as he said, refreshed from his walk. *Asked Roberts whether he had altered his intention with respect to his will, and he said he had not.* Said, 'I think you had much better make the will to-day, as Dr. Franklin and myself are both at liberty.' *He showed some disinclination at first, and said he would do it in the course of the week.* I said, 'I cannot make it for you then, for I expect to leave for London to-morrow, and may be detained a week or a fortnight; *you had better ring the bell, and send for Dr. Franklin.* Dr. Franklin was sent for. I made the will. Wrote it while Dr. Franklin was being sent for. *Asked Mr. Roberts if he had altered his intention with respect to the disposal of his property.* Wrote the will in Mr. Roberts's presence, and read it over before Dr. Franklin arrived. When the Doctor arrived, I told him Mr. Roberts was desirous of making his will. Handed the will to Mr. Roberts, and said, 'Read it yourself.' Mr. Roberts read and signed the will. I mentioned the usual formal publication, which words he repeated after me. Dr. Franklin said, 'Mr. Roberts, you quite understand the nature of your will?' Mr. Roberts said he did. They then put their signatures to it as attesting witnesses to the will. I asked Roberts whether I should take the will with me or leave it; and he told me to take it with me. After the

signature of the will, remained with him about ten minutes. He was in the same state when I left him as during the remainder of the interview. He was perfectly competent to dispose of his property, or I would not have signed it. I had latterly seen him under much depression. He was less depressed in his spirits on the Sunday when he signed his will, than I had seen him for a long time. He was calm and collected, and free from despondency. He gave no reason for wishing to put off making his will. I considered it was mere matter of procrastination.

Mr. Wm. Smith: On Saturday evening, the 3rd of December, went to see Mr. Roberts at his house. Dr. Franklin was there. Asked how he was, and *he put his hand up to his head, complaining bitterly of pain.* Dr. Franklin said he had been endeavouring to prevail upon him to take medicine, and he again asked him to take some. He refused, saying, "*My life is valuable for my wife's sake.*" *He gave the same answer several times over to Dr. Franklin and himself.*

Mrs. Roberts, the widow, deposed that Mr. Roberts's health declined in 1850. He wasted considerably within the last few months. *He was lately more excited in mind;* he suffered a great deal from sciatica; that made him irritable. Although he became more irritable, she found no change in his understanding with reference to matters of business,—not the least. On the Saturday, December 3rd, she sent for Mrs. Kerslake, his sister, stating that her brother was very ill, and she should like to see her in consequence. She came between ten and eleven o'clock, and saw her brother. She showed her Mr. Wallington's note. Mrs. Kerslake said she was not aware her brother was so ill. She told her he was very ill; and Mrs. Kerslake said she thought her brother ought to settle his affairs. She had heard that Mr. Roberts and Mr. Wallington had had some conversation about a will. She did not know how her husband intended to dispose of his property. When Mrs. Kerslake left, Mrs. Roberts accompanied her. When he came back, he said he would go to the Public Hall and read the papers. *When he came back from there, there was something peculiar about him.* He had met with Mr. Payton and Mr. Cookes. He said, "That fellow Payton wanted to come in and take wine; but I would not have it." *He was very much excited, and very different to when he went out.* Dr. Franklin came soon afterwards, and wanted to induce him to take the medicines which he had prescribed for him the day previously. He refused. He never would take medicine if he could avoid it. He had no objection to external applications. He would apply to medical gentlemen for advice, but he would not take their medicines. On this occasion he said, "No, Dr. Franklin, *I will not take it; my life is too valuable to this good lady, my wife.*" He was in the habit of expressing himself strongly, and was very obstinate at times. The excitement lasted half-an-hour. He went to bed, and passed a good night. Two men were sent by Dr. Franklin, but she did not know that till the next morning. Tilsley, the gardener, stayed in the house that night, but she did not know it till after. He once imagined there were people outside the house. *That was, perhaps, twelve months previously.* She thinks he called two policemen out of

the window, to ask them to look round. It was the horse that made the noise. *She recollects his getting up one night in November, and burning some papers.* He said he had some old papers, and should like to destroy them. She got up too. They were old letters and town papers. She thinks it was between midnight and break of day. He was a bad sleeper. He always formed his business plans at night, and would get up and make a note of them. He would sometimes get up and write letters in the night. This had been the case for many years. On Saturday he passed a good night, and on Sunday morning he appeared better. Previously to that his nights had been bad, and this was the first good night he had had for some time. After dinner, he walked out for about two hours. When he returned, he said he was much better, and refreshed. Mr. Wallington came and waited till Mr. Roberts came in. When he returned, Mr. Wallington asked for a sheet of paper, on which she had understood the will was to be made. She was, that day, constantly in communication with her husband. There was nothing in his conduct that she perceived, that gave any indication of his mind being affected,—not the slightest. He was calm that day, and there were no signs of excitement. He did not talk a great deal. He was not in his usual high flow of spirits. His spirits were lower towards evening, and he complained of his head. He was excited next day. On Monday morning, Mr. Roberts appeared to be going on favourably. In about an hour, before the breakfast things had been removed, he said to his cousin, who had come in, “*Selina, come out of the room; the chimney is on fire.*” There was a very large fire, and they were burning Cannel coal in a stove, which made a great noise. She has been alarmed by the same thing since then. Her husband went out of the room. The fire was put out. He was very excited in the morning, and was worse that day. Dr. Franklin came, and could not succeed in inducing him to take medicine.

Joseph Franklin had observed his health give way for two or three years. Saw him two or three times in the week previous to Sunday, the 4th December, and thought him ill. Went to his house one evening that week. His intellect was as usual. Saw him about twelve o'clock on Sunday, the 4th. Mrs. Roberts was with him. He was very self-possessed and composed,—more so than he had seen him that week. He seemed more subdued and calmer than when in his usual state of health. He was naturally an excitable man. Never found him very violent, but boisterous. Never saw him in any very violent passion; he liked to have his own way, was self-willed and obstinate. On this Sunday he was perfectly calm. His state of mind was calmer that night than usual. Had never seen him so calm or self-possessed before that night. His ordinary manner was very cheerful, very talkative, very merry, and he liked to have most of the conversation to himself, expressing himself very strongly, with a loud voice. He was not in that state on the Sunday. He understood and answered all the questions he put to him. Considered him as capable of understanding business as ever.

Mr. Jones was driving to Weston on Sunday, the 4th, and met

Mr. Roberts. There was nothing remarkable in his manner. He appeared perfectly calm.

Mr. Chattaway saw him on Sunday, the 4th December. Previous to that had noticed his health declining for some time. He never complained to him till that day. Went there between five and six in the evening, and said, "I am sorry to hear that you are so unwell." He said, "I am ill." Stopped with him a quarter or half-an-hour. They conversed the whole time on various topics. There was nothing to induce him to believe that his intellect was affected. He was particularly calm,—more so than I had ever seen him. He was for some time before generally in high spirits, but irritable to some persons. There were certainly no symptoms of want of clearness in his mind. He was capable of transacting any business.

Mr. Alexander had known him well for twenty years. Saw him last on the 5th December, when he conversed with him rationally for an hour and a half upon town affairs.

William Alderton, the attendant sent by Dr. Conolly, was the next witness examined. His evidence will be found detailed in a subsequent part of this article.

Dr. Franklin deposed that he first knew Mr. Roberts in 1852, when he attended Mrs. Roberts through a long illness. Attended him prior to his death. His attendance upon him commenced on the 2nd December. Prescribed for him in 1852. He was then suffering from neuralgia, arising from the state of his liver. *On Friday, the 2nd of December last, he was called in, and found him nervous, feverish, excitable, and with more or less heat about him. Then attributed the whole of his indisposition to a congested state of the liver, and enlargement of the liver.* That state of the liver was a condition likely to act on the brain, and to produce mental as well as bodily excitement. It was in the afternoon he saw him. *Saw him again on the following morning.* Prescribed for him, but could not induce him to take medicine. On the Saturday morning he was in pretty much the same state. Again urged him to take medicine, but without success. Saw him again on Saturday evening, and he was more excited and heated. Thought him worse. *He thought it necessary to take the precaution of having two men in the house.* He was in that excited state, that he thought himself responsible. *The state of his liver was such as was likely to produce delirium. Urged him to take medicine that evening. He resisted all his efforts to persuade him, and he could not succeed. He said his life was too valuable for his wife.* He had recovered considerably before he left, but he thought some slight delusion had set in. He could not tell whether what he said arose from delusion or trick to evade taking the medicine. That was the only delusion he noticed, if delusion it were. Saw Mr. Roberts about ten on Sunday morning. He had had a good night, and was much improved. He was quite composed. There were no remains of excitement or delusion. He appeared to be in possession of his faculties. Was sent for in the evening. Previous to that, had been spoken to by Mr. Wallington, as to witnessing his will. He said he had received instructions to make Mr. Roberts's will, and he wished me to

witness it. Communicated to Mr. Wallington his view of Mr. Roberts's state on Friday evening. Urged him to haste, telling him that Mr. Roberts was labouring under great bodily affliction, and he could not tell how soon that might affect his mind. In the bodily state he was then in, he might be suddenly attacked by delirium without any premonitory symptoms. On the Sunday evening, when he arrived at Mr. Roberts's, he found Mr. Wallington with Mr. Roberts. Mr. Wallington said he wanted him to witness Mr. Roberts's signing his will, and he put the will in Mr. Roberts's hand. The candles were then lighted, and he held the candle while Mr. Roberts read the will. As soon as he had read it, he got up and went to the table, and signed it. He did so entirely of his own accord—voluntarily. He was not solicited either by Mr. Wallington or himself. Asked him if he knew the nature of the paper, and was satisfied with its contents. Has been called on to witness other wills, and it is a rule he makes to ask that question. The answer was, "Perfectly so." Upon that, signed his name as an attesting witness. When he went in that evening, Roberts put out his hand, and said, "How do you do?" His condition in the evening was, if anything, better than in the morning. His mind appeared perfectly clear. There was no excitement. He was perfectly clear, and there was nothing to excite a doubt in his mind that he perfectly understood what he was doing. Certainly would not have signed the will if he had had the least doubt of his capacity to execute it, or understand what he was doing. Saw Mr. Roberts again on Monday morning, and found him pretty much as he had left him the night before. In the evening of Monday, he thought him a little more excited. Had not been able, up to that time, to induce him to take any medicine. On the following day, he was more restless, and had more fever. On the Tuesday, Drs. Conolly, Jeaffreson, and Franklin met in consultation upon the case. Mr. Roberts afterwards got worse, and on the 8th or 9th was rather violent, and there was considerable delirium, requiring restraint, which subsided in the course of the day. Delirium showed itself at intervals. There were at times paroxysms of the disease, attended with delusions. He had temporary delusions and lucid intervals.* The delusions were never reproduced again in the same form. The symptoms improved after the 15th December up to Christmas, and then they became worse. He had a long interval at Christmas, when the whole body and mind were much improved. The bad symptoms re-appeared in the beginning of January. He suddenly got worse again, and continued growing worse till he died on the 1st of February, 1854. The excitement on the Saturday was the consequence of the diseased state of his liver. The same cause produced the excitement on the Monday and Friday, and so on throughout the illness. *Thought there was nothing more than a functional disturbance of the brain.*† In the earlier part of his attendance, did not consider that Mr. Roberts was suffering from

* Dr. Franklin was never asked to explain what he meant by a "lucid interval."

† Compare this statement with the actual organic changes found in the brain after death, and Drs. Franklin and Jeaffreson's medical certificate as to the cause of death, viz. "*sub-acute arachnitis of two months' duration.*"

any structural alteration of the brain; the functions of the brain were not destroyed, but disturbed. In the latter part of the disease it was very evident there was either a structural alteration or a congestion of the brain.

DR. CONOLLY went to see Mr. Roberts on Tuesday, December 6th, 1853, at his house at Leamington, with Dr. Jeaffreson and Dr. Franklin. Found him walking about with his hat on, moving from room to room; often walking to the door as if with an apparent intention of walking out—then coming back again—restless. Thought him looking extremely ill. His aspect indicated the existence of some bodily complaint. His colour was bad, and he was dull, depressed. He answered distinct questions distinctly; there was no manifestation of violence, merely restlessness. He persuaded him to take some medicine. Called again on Tuesday evening. He had then become quiet. He had taken some medicine. He was confused, but he observed no delusion. On the following morning found him very remarkably improved. There was no appearance of confusion; he was quite calm, and clear, and, he might say, quite rational. Did not see him again after Wednesday morning. Wrote to Mr. Alderton (the attendant) on the day that he arrived at Leamington, seeing that Mr. Roberts was so confused, thinking that he might walk out or get into danger; and thinking that he was not fit to take care of himself, and wanted a person near him. He was also induced to do that from the information he had received, that he had been more troublesome than he was then. From the great improvement which took place between the first day and the second, he thought that medical treatment would have a great control over the mental and bodily health. Hoped with a bodily improvement the mind might be entirely restored, but he thought him seriously ill. Thought that both his mental and bodily state were seriously affected, and that he would die. With regard to the morbid appearances of the brain after death, he confessed his opinion to be, that the disease of the brain, as disclosed by the *post-mortem* examination, was not altogether of a standing so recent as the 4th of December. From what he saw of him on Tuesday, and the remarkable change which he observed in him on the Wednesday, it is clear that he might have had such distinct changes before then; and he might have them often. “It was not a slight change in the testator’s state, but a very striking one—a complete change. *From the change on the Wednesday, he had no doubt that he was FULLY COMPETENT TO MAKE HIS WILL ON THE SUNDAY, the 4th. From what he saw of him on Tuesday only, he should have doubted that!*” We beg our readers’ particular attention to this opinion.

Dr. Jeaffreson knew him about eight years before his death, and had professionally attended him. Considered him quick, shrewd, and intelligent. Accompanied Dr. Conolly and Dr. Franklin to see Mr. Roberts on Tuesday. His opinion agrees with Dr. Franklin as to his then state. He was extremely ill, with a great deal of febrile disturbance; very loaded tongue, and exceedingly quick pulse. He agreed in the medicine that was prescribed for him. Visited him next day. He was rather better. On the Wednesday he appeared more conscious and more disposed to enter into conversation than on the

previous day. On the Wednesday his mind was sufficiently clear to enable him to understand any act of business. He got much worse after the Wednesday, subsequently to which he became calmer and better. About Christmas he seemed to be getting better. Was a party to making an arrangement as to his going away for a short time to a friend in the country. Assisted at the *post-mortem* examination. He drew up the report. Considering what was his condition on the Wednesday, there is nothing, in his opinion, inconsistent in the supposition of his being perfectly competent on the Sunday. "*A great deal would depend whether certain tests were applied to his mind on the Sunday, and on all occasions.*"

Dr. Alfred Swan Taylor deposed that he had heard the whole of this case. He had had his attention directed to the report of the *post-mortem* examination. His opinion upon the appearances presented by the brain, was, that they did not necessarily show a disease of long-standing. They indicated structural derangement of the brain, but not to a very great extent. They indicated structural derangement to such an extent as might have been produced within a period of four or five weeks, with the exception of the thickness of the skull, which must, of course, be of longer duration. He did not think they must have begun some months before in a slight inflammation of the membrane, until, within a month of the expiration of life, they assumed the aggravated shape in which they appeared after death. Having heard various facts spoken to connected with Mr. Roberts's illness on the Friday and Saturday, the alteration in his state on Sunday, and so on, it left him nothing to doubt as to his testamentary competence on the Sunday. Assuming all these facts as stated, assuming that on Monday he had the delusion as to the chimney being on fire, and on Tuesday that he was excited, but on Wednesday improved, and taking the rest of the case from Alderton's account of subsequent delusions, there was nothing, medically or physically, inconsistent with his being in a sane mind to make a will on the Sunday.

The following witnesses were examined on behalf of the defendant :

Henry Barnett, a gardener, had known him a good many years perfectly well. He was in the habit of coming to his place and stopping, and talking to him a considerable time. When he put up for Warwick he canvassed him. *When he first knew him, he was a sensible and rational man. Last year he became altered a little; he became more "blustering."* He talked more at random than he used to do. He asked him about planting five acres of asparagus, and, after that, proposed planting three acres of strawberries. *He said he wanted to rent land at 10l. an acre, and pay 50l. per cent. on the outlay.* He recollected when Lord Warwick died. He told him he should put up for member for the county. He appeared to be in earnest, and asked him for a vote. All his talk was about elections and taxation; and then he was "blustering" with his stick. He used to be a clever man; and became a more "blustering" man than he used to be.

Henry Needle had known him for nearly forty years, and been in the habit of seeing him often. Last summer called upon him at Leamington. He complained that he had been ill-used at Warwick,

but said he should come again. He complained that he had been charged wrongfully in money matters. *He was very much excited. He put himself into a fighting attitude, and seemed very desperate.* The language used by him was not very much, but he seemed very agitated. His manner at that time was different from what he had known him before. Thought from his manner that his mind was affected. Met him on the day of Lord Warwick's funeral (August 19). He said, "*I am coming for the county; I hav'n't given it in yet; I am coming for the county.*" Nothing else passed. His manner in saying those words was not the same that he thought it ought to have been. Recollected seeing him at the races in September; he had been riding about. He was on horseback, and talking in a very high sort of way. *He talked very loud, like a very great man.* Had seen him riding about very fast indeed, at many different times, up and down the streets, unnecessarily fast.

Mr. W. Carpenter had seen him at meetings of the Local Board in August 1853. *He was violent and loud in his language.* His tone was most violent, and his manner as though he was raving on the subject.

Mr. H. Houghton Young: Mr. Roberts was very violent at times at the meetings of the Local Board, especially when excited. On one or two occasions he was very much excited.

Mr. F. Bowman: Mr. Roberts bought a piano in November last for 175 guineas, and a week after paid for it. The next day he called again, and told him he had had a disagreement with Mrs. Roberts about the piano, and he wished him to take it back. *He was very much excited. He cried.* He offered him 20*l.* to take it back, and he agreed. He told him that Mrs. Roberts had disapproved of his buying the piano, and it had led to a serious quarrel. *He cried all throughout the last interview.*

James Coleman: In the autumn of last year his manner was changed. He saw him one day riding up Leam Terrace with his white hat on his stick. *He was spinning it round.* It was not a hot day. It was in the month of October.

James Shepherd, a porter, saw Mr. Roberts at Messrs. Cookes's workshop about three weeks or a month before he went to his house (*i.e.* before the 5th December). *He seemed in a very excited state, singing, whistling, and dancing.*

Joseph Beeson, a police officer, of Leamington, recollected that on Saturday the 3rd of December last he was on duty in the Upper Parade. Mr. Roberts came up to him. *He had his coat and waistcoat unbuttoned, and his slippers were down at the heels: it was very cold weather. It was about half-past four in the afternoon.* He said, "*Policeman, come here; I want two policemen to protect me. Dr. Franklin is going to kill me.*" *He appeared to be very much excited, and in a deranged state of mind.* Told him one of their men had just gone towards his house, and if he wanted any more assistance he would come. Followed him to the corner of the Parade, as far as Warwick-street, when he went in the direction of his own house. There were several persons passing by, who turned round to look at him. Had seen him riding furiously up the streets. He had spoken to him, and

told him if he did not desist from it, he must report him. He was in the habit of doing it when he came out on horseback. He was always fond of galloping his horse. He put on his hat, and said, "I'll be d—d if I have this." *If Mr. Roberts had not been a gentleman whom he knew, he should have taken him to the lock-up as an escaped lunatic!*

Daniel Talbot, another policeman, was on duty on Saturday, the 3rd of December last, in the evening, in the street near Mr. Roberts's house, and saw Mr. Roberts. He was going in the direction of his own house. *He had got his waistcoat and coat unbuttoned; and his hat in his hand, swinging it. He had slippers on which were down at the heels. He was making a noise, swearing to himself, as he went along.* Heard him damning and cursing as he went along, but he took no notice of it.

W. Shirley Roby, Superintendent of the Leamington Police, had often seen Mr. Roberts riding furiously through the streets, and several times in a dangerous manner. Had frequently cautioned him to ride less furiously. Had heard him cry "Tally ho!" as he was riding along the streets last autumn. Always thought there was something strange about him.

W. Hughes Payton: On Saturday evening, 5th December, called to inquire how Mr. Roberts was. Saw Mrs. Roberts, who appeared in great distress, and requested him to talk to her husband. They saw him pass on the other side of the street, and went over to him. *He appeared in a most excited state at that time. He did not seem to alter in consequence of his speaking to him. They could not get him in.* Mr. Cookes went and brought Mrs. Roberts. *She cried very much, and made every effort a poor woman in her distress could. She addressed him in the most endearing terms, and he would not go in for some time. He declared, over and over again, that he would not go into the house. He had frequently heard him talk about Parliament in a very excited manner.*

John Mander said, Dr. Franklin sent him to Mr. Roberts's house on Saturday night about ten o'clock. Dr. Franklin came to his house, and said he wanted him to go to a gentleman's house, and to get another man to go with him, and that very quietly. He got another man, and went to his house. He told him to go to Mr. Roberts's. They sat up all night, but were not called upon to do anything. Had been employed by Dr. Franklin before, to look after a woman who was mad.

James Coleman: On Monday, 5th December, 1853, he was directed to go to Mr. Roberts's house to render assistance. Saw Mr. Roberts, who looked very wild. He was running round the table, and a female servant was running before him. She seemed a good deal frightened. Mr. Roberts appeared very excited. He caught hold of Mrs. Roberts by the wrists: he said, "G—d—n you, fetch some brandy and water, the house is on fire; look at the flames." Was afterwards sent into the kitchen, when Dr. Franklin came. Mrs. Roberts brought down a washhand-basin with blood and water, as if somebody had been blooded.

W. Richard Davis: Saw him on the 5th December. There was a crowd of people round the area-gate. Mr. Roberts was trying to get out of the front door, Mrs. Roberts was trying to prevent him. He said the house was on fire. There was an ordinary fire in the grate made of Cannel coal. He said there was a hogshhead of brandy under the fireplace, and the house was in flames. Stopped about an hour and a half, and tried to pacify Mr. Roberts, but could not succeed.

James Shepherd and Robert Smith, who were in attendance upon Mr. Roberts on the night of the 5th December, and subsequently, were next examined; the substance of their evidence is given in another part of this article.

Mrs. Mary Ann Kerslake, the sister of Mr. Roberts, deposed that she met her brother on the Emscote road, in the summer of 1853. He was on horseback. *He was riding in the most furious manner, with his arms stretched out, his feet out of the stirrups.* He passed her without speaking. On the 19th August, the day of Lord Warwick's funeral, she and her husband dined with Mr. Roberts. *She thought he was very extraordinary in his manner and conversation. He was very much excited.* She recollects, some time after that, going to his house. She was unwell, and stayed the night. When she was in bed, Mrs. Roberts came up into her room. That was on the 29th of August. He said, "Mary Ann, I am very glad to see you; I have been wishing you to come over." She said, "Your brother's going on like mad. He's been spending the money, and it will be all gone. Mr. Walter Cookes and I have been talking about what had better be done. He's quite incapable of managing his affairs, and we thought that he had better be sent away for a short time." I said, "Do not talk in that way, Elizabeth; it hurts my mind beyond everything. If it should get known in Leamington, they might put a strait-waistcoat on my poor brother. If they put him under restraint or punishment, it will be the death of me." She said, "He has actually been about purchasing an estate at Wolston, fit for a nobleman, and Mr. Walter Cookes, who has the estate for sale, has remonstrated with him; but," she added, "he has not the money to pay for it." I said, "I should fancy my poor brother must be out of his mind." I think she said, "Yes, I think he is." In the course of the conversation, she said he got up at twelve o'clock at night, and said there were men outside, bailiffs, waiting to come into the house. She remembered the Queen having passed through Leamington last autumn; she thought about the end of August. After that, Mrs. Roberts said Mr. Roberts was on the platform, and making a great noise; that Lady Dubonlay was there, and that he was talking to her ladyship in a very queer way, and said, "If your ladyship wants any sum of money, I can lend it to you. If your ladyship wants a thousand pounds or upwards, I can lend it to you. I shall be Chancellor of the Exchequer soon." I don't know that she said he said so to Lady Dubonlay; but he said it on the platform, and it was all part of the same conversation. She said that she felt quite ashamed of him. She said that some man who stood

behind him said, "D—n you, you d—d fool, I think you will be in a madhouse before you are Chancellor of the Exchequer!" She saw her brother several times after that. She perceived that he was getting worse in his mind. Recollected, on Saturday the 3rd of December, receiving a note from Mrs. Roberts. She went over to Leamington immediately. She saw her brother there, and as she went in, he was pacing up and down the room in a very wild manner. He came close up to her, stared at her with a wild vacant stare, his eyes so large and glassy, but did not appear to know her. He did not appear conscious that any one stood before him. She said, "Henry, dear, how do you do?" He made her no answer, but soon after left the room. She was very much frightened at his appearance, and burst out crying. Mrs. Roberts came into the room, and shook her head, and seemed to intimate by that, "Poor fellow! he is out of his mind." Mrs. Roberts said, "I had a great piece of work with him yesterday; he was raving all day to come over to see you, and we could not pacify him. He wanted to come over to see you at ten o'clock at night." She said that he had not been in bed for three nights. She could perceive that he was pacing up and down the drawing-room while she had this conversation with Mrs. Roberts. She said he had been fancying, on the Friday, that the bailiffs were outside the house. She said he kept saying, "The bailiffs are outside; we must go—we must go; they wont let us have any tea." He came into the room where she was during the day. He kept running up and down the stairs. He seemed to have no particular object in doing so. He was out of her sight for a considerable time. She spoke to Mrs. Roberts about the medical advice she had. She told her that Dr. Franklin was not sufficient for such a case as her brother's; she ought to have superior advice. She suggested that Dr. Jeaffreson, or some one who understood his case better, ought to be called in, and if Mrs. Roberts would not call him in, she would. She made no remark on that. She dined there with Mrs. Griffiths. Mrs. Roberts was attending to Mr. Roberts in another room. She recollects Mrs. Roberts putting a note into her hand from Mr. Wallington, and saying, "Here, go into the other room and read that." It purported to come from Mr. Wallington to Mrs. Roberts. Could not say the date of it. The contents of it were that—"I've seen Dr. Franklin, and it is his opinion that the most energetic measures must be resorted to, to induce Mr. Roberts to make his will. It is Dr. Franklin's opinion that he cannot retain his faculties three days longer; for instance, he is now wanting to mortgage his property. You have influence, and must exert it to the utmost. Tell him that you will be getting old, and that you will have to work for your bread, and will be left penniless. Dr. Franklin and I shall be at your house in the evening, or it may be too late." It was his "faculties" which the note said he could not retain for three days, and not his "life." She had some further conversation with Mrs. Roberts. Her brother was not present. She wrung her hands in great distress, and pressed her very much to go to Mr. Smith, to get him to come and use his influence with her brother to induce him to make a will. She had not said one word before that note was put into her hand—her brother's

property never crossed her mind. Having returned the note to her, Mrs. Roberts was the first who spoke about the will. She recollects some medicine being offered, and Dr. Franklin's name was mentioned. He did not consent to take it; but raved about it. He said, "I won't take that medicine—I know all about that;—no Dr. Franklin shall make me take that." She left the house, she thinks, between five and six. There was nothing to fix the exact hour. Did not go over on the Sunday, being ill in bed from seeing the state in which her brother was. She went over on the Monday morning. Heard that men had been called in. Mrs. Roberts said Mr. Wallington had been with her brother, and came out of the room with a paper in his hand, and said, "It is done," in a most emphatic manner. She stopped there on the Monday night. His sleeping-room was not far from her bed-room. He was in the drawing-room all night, and her bed-room was over it. She heard a great noise in the night. It was a dreadful moaning noise. She could hear the voice of a man and a female. She thought that the male voice was that of her poor brother. She is of opinion that he was up the greater part of the night. Mrs. Roberts had the greatest difficulty in getting him across the hall to bed; so the servants said. She was there at the time the three doctors arrived, on the Tuesday. Mrs. Roberts made an objection to her staying. She was not allowed to see her brother on that occasion.

Hannah Lucas went into the service of Mr. Roberts, as cook, on the 17th of November, and remained till the 31st January. When she first went Mr. Roberts seemed to be in a good state of health, but he got worse after she had been there some time. She recollected the beginning of December. He was then very excitable. She did not see much of him, her occupation being in the kitchen. She believes, on *Thursday, the 1st of December, Mrs. Roberts came into the kitchen, and said, Mr. Roberts had been in a very excitable state all night. She said he thought there were men opposite his window who wanted to break into the house; and that he had gone into the drawing-room and procured some papers, and destroyed them in his bed-room.* That was before the men came on Saturday night—a few days before. On the Friday morning, Mr. Roberts was in an excited state, walking by the kitchen door. It was in the morning, after breakfast. He was walking below in the servants' hall, where some workmen were hanging bells. She saw his face, but he did not speak to her. She thought he looked rather wild. He did not come into the kitchen that day. He told the workmen to leave their work and go directly. He spoke this in a quiet manner. They had not finished. They then stopped, and left the premises. She did not hear him give any reason for discharging them. On Saturday morning, she saw Mr. Roberts between eleven and twelve. He came into the kitchen and brought a piece of meat, which he asked her to dress for dinner. He gave it to her. He spoke very calmly. He had never brought meat into the kitchen before. She believed he had let the butcher in himself. She saw no more of him that day. Mrs. Roberts asked her and Alice Steel, the housemaid, if their assistance was required that night, would they be on the alert. Nothing occurred that night. Tilsley, the gardener,

was not in the habit of sleeping in the house, but he stayed there on Saturday night. The men from Dr. Franklin came that night. Saw Mr. Roberts early on Sunday. She went into the breakfast-room to take orders for the dinner. Mr. Roberts then appeared calm and exhausted. *He was sitting, in a crouching position, in a chair. He did not speak while she was in the room, but appeared unconscious.* Between eleven and twelve, Mrs. Roberts came into the kitchen, and asked her to send Tilsley for a bladder; but did not say what was to be done with it. She went out from three to seven in the evening. She had not seen Mr. Roberts again before she went out, nor did she see him afterwards. Before she went to bed, Mrs. Roberts asked them to sleep in the coronet-bed, in a room they had not slept in before. It was on the same floor as Mrs. Roberts's room. They slept in that room, and heard nothing in the night. Saw Mr. Roberts on Monday morning, about ten o'clock. *He came into the kitchen and chased her round the kitchen several times, and called for brandy. He afterwards said the house was on fire, and I was to take him some water.* He remained in the kitchen about five minutes. Mrs. Roberts was with him at the time. Made her escape down some steps. They called in assistance. Mr. W. Phillips was the first called in. Steel called them. Dr. Franklin had not been there that morning, but was sent for when this took place.

Alice Steel, the housemaid, went into Mr. Roberts's service on the 11th of November, and remained till after his death. A day or two before the Saturday, Mrs. Roberts said Mr. Roberts had got up in the night and burned some papers; that he fancied he saw men opposite the house who wanted to take his life. She told her he had struck a light behind the curtain, because he was afraid they would see him on the opposite side of the road. On the Friday, Mr. Roberts wished to see his sister very much, and Mrs. Roberts said she was afraid she must send for her, or else Mr. Roberts would go over to see her. He was not very excited that day. On the Saturday evening, Mr. Roberts went out with his sister; he afterwards came back, and was outside the door, and Mrs. Roberts went out to entice him. There were two other gentlemen there also. Mr. Roberts had his great-coat on, but both that and his waistcoat were unbuttoned. When he came in Dr. Franklin came, and he refused to take the medicine which he wished to be taken. He said Dr. Franklin wished to take away his life by giving him medicine which he would not take. Saw him about ten on the Sunday morning. He appeared in a very low and desponding state. *Saw him several times that day, and he appeared in the same low and desponding state. He was very quiet. She did not hear him speak all day.* He was lying on the sofa. He did not get up whilst she was there. They had tea about half-past five. She saw him about half-past seven in the evening. She took up a bladder with some vinegar-and-water. The vinegar-and-water were not used before seven o'clock on Sunday. At two o'clock on Sunday he appeared to be in a very low and desponding state. She remained at home all Sunday.

William Tilsley, the gardener, remembered Mr. Roberts meeting

with an accident up the Radford-road, and his head being cut; he thinks it was in September. Saw his forehead was cut. Was asked by Mrs. Roberts to sleep in the house on Friday, 2nd December. He had not slept there before. She said she had turned her servant away for misconduct, and she wished him to abide in the house if he were wanted. *There were two other men sleeping there.* Slept in the house on Saturday night. On Sunday, Mr. Roberts did not appear to be in any different state than since he had been ill. *He appeared to be more like a man that had had a little drop of grog than a person who was ill.** He could not say he was insane; he was in his usual state.

Mr. Morris saw Mr. Roberts on Sunday, and found him sitting, with linen cloths to his head, with vinegar and water. He was much depressed, and complained of being unwell, and seemed in much pain. He seemed, when he first entered, somewhat delirious from the pain. In his opinion the excitement under which he saw him was the result of pain.

Dr. Forbes Winslow was examined by Mr. Sergeant Miller, and said: I have read the account drawn up by Drs. Jeaffreson and Franklin, of the *post-mortem* examination of Mr. Roberts, and have well considered its details. I am satisfied that the structural changes there described must have been of some months', if not of longer, duration. If I had seen the morbid appearances described by these physicians, I should have had no difficulty in predicating that the person whose brain was so altered in its structure, must have, during life, manifested a disordered state of mind: this derangement may, and probably did, exist for some time prior to death. Considering the *post-mortem* account, I entertain no doubt that the structural alterations there described must have been progressing for some period,—certainly for months, and probably for years. Such a condition of brain would perhaps, in the first instance, give rise to eccentricity of conduct and irregularity of thought, which might escape observation until the disease of the brain and consequent disorder of the mind reached a further stage; and then obvious and unmistakable symptoms of insanity would be manifested. Diseases of the brain, as a general principle, are of slow and almost imperceptible growth. Referring more particularly to the account of the *post-mortem* examination now before me, I observe it recorded, that "the cranium was exceedingly thick." I do not attach much importance to that fact; for although such a condition of the bones of the skull is one of the recognised symptoms of long-continued cerebral disease and chronic insanity, it may exist, as a normal condition, without disease of the brain or insanity. It is notorious that men of great ability have had thick skulls; such was the case with Professor Porson. Looking at this symptom alone, I would attach no special value to it; but I think it assumes importance when viewed in association with the other brain conditions described in the *post-mortem* examination. The attachment of the "dura mater" to the skull in the "mesial line" is said to have been very firm. This

* In many cases of insanity, particularly in the incipient stage, the patient appears like a man under the influence of stimulants. Hence the common remark is, "he is either *drunk* or *mad*."

is a morbid appearance frequently discovered in cases of chronic insanity. Again, "the pia mater was found to be exceedingly vascular." This is an important symptom, as this membrane immediately invests the brain, and dips down between its convolutions. A highly congested and vascular state of the pia mater could not have existed without considerably disordering the functions of the brain. But I attach more weight to the next morbid appearance described in the *post-mortem* account. I find it stated that "the arachnoid membrane was universally distended by a large amount of serum effused underneath it; the membrane itself presenting in many parts the appearance of being somewhat thickened; and in almost all, of being more opaque than natural. At the base of the brain the sub-arachnoid effusion was, if anything, even more abundant than on the upper parts." There are no morbid appearances of the brain more generally discovered after death in cases of insanity, and insanity, too, of some duration, than such a state of the arachnoid membrane and "sub-arachnoid effusion." Such a condition, in my opinion, is incompatible with sanity. If I had examined Mr. Roberts's brain, and had known nothing of the state of his mind prior to death, I should have concluded, after having detected the appearances detailed by Drs. Jeaffreson and Franklin, that he had died from an attack of insanity extending over many months.

Sergeant Miller: I have in my hand the last edition of Professor Taylor's "Medical Jurisprudence." I find in it the following passage: "In some cases a medical practitioner may be required to state whether certain appearances found in the brain of a deceased person do or do not indicate the past existence of a certain degree of insanity or imbecility. *The appearances commonly met with on inspection are: thickening of the bones of the skull; close adhesion of the dura mater to the skull; great congestion of the pia mater; and opacity and thickening of the arachnoid membrane.*" Do you agree in the opinion thus expressed?

Dr. Winslow: Yes, I find the appearances of Mr. Roberts's brain, described by Drs. Jeaffreson and Franklin, in phraseology exactly similar to that used by Professor Taylor.

In answer to other questions, Dr. Winslow said, "as Mr. Roberts's mind must have been affected for some months, it would be difficult to describe where eccentricity ended and insanity commenced. It would be impossible, judging from the alterations found in his brain after death, without evidence as to his state of mind, to give any satisfactory opinion as to the period when he was reduced to such a state as to be incapable of doing a rational act. I consider that much of the eccentricity and oddity described by the witnesses, and which were evidently changes from his natural mode of thinking and acting, to have been the effects of incipient disease on the brain. The commencement of attacks of insanity and brain disease may be traced back, in many instances, for some years. When positive disease of the brain and obvious insanity manifests itself, and we examine the past history of the case, with the view of tracing it to its incipient stage, we often are able to detect well marked symptoms of mental disease, manifesting itself in the conduct and thoughts of the party, that had entirely escaped

the observation of the patient's relatives and friends. Such a state of mind might exist for a considerable period, even for years, without exciting any suspicion as to the actual condition of the mind, unless the person so affected were to be attacked by some acute bodily disease, or exposed to the influence of a severe moral shock; then, in all probability, the incipient disease of the brain and mind would reach its crisis, and positive and unequivocal insanity develop itself. The mind may be fluctuating between sanity and insanity, and in a morbid and unhealthy state, without exhibiting any obvious manifestations. In considering the value to be attached to structural alterations of the brain, it is important to make a distinction between morbid changes detected in the grey or cortical, and that which is termed the medullary or fibrous portion of the brain substance. You may have organic alterations in the interior and less important parts of the brain, without obviously affecting the mind. There may be softening, tumours, and even abscesses, existing in the white or fibrous portion of the brain, without insanity: but no serious disease, congestion, or alteration of the cortical or grey matter on the surface of the brain can be present without disturbing the operations of thought, and deranging the mind. The slightest pressure on the exterior of the brain, even to the extent of a drop of blood or effusion of a small quantity of serum, may make all the difference between the possession of reason and insanity. I refer to this well-known pathological fact, with the view of explaining why I attach so much weight to the "abundant sub-arachnoid effusion" that was discovered in Mr. Roberts's brain after death."

The Judge: Dr. Winslow, if you had seen Mr. Roberts's brain, I presume you could have come to a more satisfactory opinion as to the probable duration of the disease?

Dr. Winslow: Certainly. Having heard Mr. Roberts described as a man of determined will and of much vigour of mind, I am of opinion that, coupled with the other symptoms of his case, the fact of his crying when he went to the pianoforte-maker was a sign that the mind was not then in a healthy condition. In insanity there is often alternately fits of excitement and depression. In incipient insanity, depression is frequently the result of bodily disease. During attacks of the acute forms of insanity, the patient occasionally exhibits transient moments of apparent calmness and lucidity, during which he is often able to recognise his own morbid state of mind, may appear to talk coherently and rationally on some trivial and unimportant points, and yet the disease of the mind be continuous. I have often had under my care cases of the kind.

In answer to a question from the Judge, Dr. Winslow said that he did not agree with the other medical witnesses, that the state of Mr. Roberts's mind entirely arose from the condition of the liver. The disease of the liver might have been the primary affection, the brain, from sympathy with that organ, being secondarily implicated; but, whether the disease of the brain was primary or secondary, the results were, according to his judgment, practically the same. I have heard detailed the symptoms manifested by the deceased on the Friday and the Saturday, and the delusions he then had, and his refusal

on the Saturday to take medicine from Dr. Franklin, alleging that his life was too valuable to admit of his doing so. I have also heard it stated that on the same evening he called in a constable to protect him from Dr. Franklin, under the impression that he had designs on his life. I consider that at this period he was undoubtedly labouring under insanity. Considering his pertinaciously refusing to take the medicine from Dr. Franklin, and coupling that with the observations he made about his life being too valuable, with the fact of his not refusing to take the medicine that Dr. Conolly prescribed, I am of opinion that this was a delusion. He was evidently under the impression that he was going to be poisoned. I think there could be no doubt, from the evidence, that he was insane on the Friday and the Saturday, and that on the Monday he was unquestionably in the same condition. I am also clearly of opinion that he was in the same state on the Tuesday and on the Wednesday. I can come to no other conclusion, if any credence is to be attached to the evidence of Alderton, Shepherd, and Smith, who had the charge of him on that day, were constantly about his person, and who speak positively as to the presence of various delusions existing in his mind. I now refer particularly to Wednesday, when Dr. Conolly considered him free from all insanity. Considering his undoubted and admitted insanity on the *Friday and Saturday*, the 2nd and 3rd December; *his unmistakable insanity on the Monday, Tuesday, and Wednesday*, the 5th, 6th, and 7th of December, and which state continued with but slight variations up to the period of his death; bearing in mind that there was an absence of all scientific test as to the state of his intellect on the Sunday; and associating with this the serious organic changes found in his brain after death, and which must have been of some months' duration, I do not think that on the Sunday, the 4th of December, Mr. Roberts could have been of sound mind. If the insanity of the Friday and Saturday was the result of structural alterations in the brain, *those must have existed on the Sunday, in all probability affecting his mind on that day.* He might have had, on the Sunday, a temporary lull, and apparent calmness and freedom from excitement; but this condition of mind is quite consistent with unsoundness. I do not consider the symptoms those of *delirium*, but of insanity. The morbid appearances of the brain after death conclusively establish this point to my mind. If the attack had been one of *delirium* and not insanity, the state of the brain would have been very different. If, on examining the brain, Drs. Jeaffreson and Franklin had merely discovered a slight congestion of the surface, amounting to a mere blush or a fulness of the vessels, it would have somewhat altered my opinion as to the character of the mental disease. The alleged subsidence of the insanity on the Sunday is no proof of the mind being then in a sound and disposing state. A person may have an attack of organic disease of the lungs, indicated by impeded respiration, cough, purulent expectoration, fever, emaciation, &c., and all these symptoms may be considerably relieved by appropriate treatment; and, at times, the patient may appear free from serious pulmonary disease, but as long as the structural change exists in the lungs, he could not be said to have healthy organs of respiration. It is exactly so with disease of the mind the result of organic mischief

in the brain; the moments of apparent calmness and rationality are illusory, the mind actually continuing, during the whole of the attack, in an unsound state. My opinion as to Mr. Roberts's unsoundness of mind on the Sunday is strengthened by the absence of all tests as to his actual state on that day. If his mind had been examined on the Sunday, with the view of ascertaining his capacity, my opinion might be modified. If I had seen him on the Sunday, for the purpose of testing the state of his mind prior to his executing a will, I should have asked him several questions as to his family, and whether there were not persons who had claims upon him. I should have ascertained if he knew the extent and nature of his property; and particularly if all the morbid delusions of the Saturday had entirely passed away from his mind. No examination of Mr. Roberts's mind on the Sunday less stringent than this would have satisfied me as to his power of disposing of his property.

The Judge: Do you agree with Dr. Conolly in opinion that there may be considerable structural disorganisation existing in the brain without insanity?

Dr. Winslow: Not without considerable qualifications. There may be structural alterations in the white or fibrous portions of the brain without producing obvious insanity; but, according to the received dicta of eminent pathologists, there can be no organic changes in the grey or cineritious parts of the brain, without affecting the operations of the mind. The grey or cortical substance is considered to be the seat of the intellect, and the source of the nervous power.

The Judge: Do you agree with Drs. Conolly and Taylor that it is a common symptom in attacks of acute insanity for the delusions to be fixed and permanent?

Dr. Winslow: I do not. In acute insanity the delusions frequently change; in chronic insanity and monomania they are generally fixed and permanent.

Dr. Winslow, in continuation, said: "If there had been no such evidence of serious structural disease of the brain, I should have given a much more qualified and doubtful opinion. The fact of his asking questions of friends, and conversing with them, is consistent with the continued presence of insanity. This feature is present in many cases of undoubted mental derangement."

The Judge, after reading the account of the disease of the liver, as stated in the *post-mortem* examination, asked the witness whether he did not consider the disease of the liver had been of long duration?

Dr. Winslow: Yes, for many years.

The Judge: Does that enable you to say the primary cause of disease of the brain was not disease of the liver?

Dr. Winslow: It is very difficult to tell; it is possible that the diseases of the liver and the brain may have gone on *pari passu*.

The Judge: Which is the most probable?

Dr. Winslow: I should imagine that the disease of the liver was the primary affection.

The Judge: Don't you conceive one of the best rules, when the question is one of degree, to look at a man's conduct and demeanour as a means of judging of his capability?

Dr. Winslow : Certainly.

The Judge then read the following portion of *Dr. Taylor's* evidence:—"I think that the state of the liver fully accounts for the state of the brain, the delusions being the result of delirium from bodily disease." Do you agree in that opinion?

Dr. Winslow : I do not.

The Judge : Do you agree with *Drs. Taylor* and *Conolly*, that the surface of the brain may be deranged without producing insanity?

Dr. Winslow : I cannot do so without throwing aside all the well established and recognised facts of pathology.

In order to complete the history of this case, we now subjoin the account drawn up by *Drs. Jeaffreson* and *Franklin*, of the *post-mortem* examination, and the medical certificate of the cause of death.

REPORT OF THE POST-MORTEM EXAMINATION.

Roberts, Mr., *post-mortem* examination, Friday, nine A.M., 3rd February, 1854, thirty-nine hours after death. Body greatly emaciated. Green discoloration in parallel lines down the hypochondriac to iliac regions in either side. Cranium, exceedingly thick; attachment of dura mater to skull, in the mesial line, very firm. On removing the dura mater, the pia mater was found to be exceedingly vascular, and the arachnoid was universally distended by a large amount of serum diffused underneath it; the membrane itself presenting, in many parts, the appearance of being somewhat thickened, and, in almost all, of being more opaque than natural.

At the base of the brain, the sub-arachnoid effusion was, if anything, even more abundant than in the upper parts. In the substance of the brain, the puncta cruent were, perhaps, somewhat more numerous than normal. We were also struck by the apparently diminished proportion of the white to the cortical structure of the brain hemispheres.

The lateral ventricles did not appear to have been unnaturally disturbed, and no other morbid condition of the brain, cerebellum, or medulla oblongata was observed.

The muscles, generally, though wasted, were of a darkish colour.

The liver was found very considerably enlarged; its surface, as well as sections, very dark-coloured (more like section of spleen than liver), apparently in an advanced stage of hepatic venous congestion. The blood in this viscus was generally more fluid than might have been expected. The gall-bladder was thickened, its lining membrane curiously mottled, looking as if incrustated by yellow plates of cholesterine; though smooth to the touch, this viscus was largely distended by dark and inspissated gall, which it would have been impossible to distinguish from grumous venous blood, but for its colour in dilution with water. Ten or a dozen gall-stones, mostly very round, and of the same colour as the mottled marks on the lining membrane, were found in the gall-bladder the largest not exceeding the size of a field-pea. Kidneys, large, flabby, and rather congested; spleen, small and quite corrugated. Other abdominal viscera not examined, but presenting no external evidence of disease.

Heart, normal. Lungs, healthy, with the exception of a little emphysema of the lowermost edge on the left.

The right pleura costalis and pulmonalis very firmly adherent, from pleurisy of very old date.

(Signed)

SAMUEL J. JEAFFRESON.
FRANCIS FRANKLIN.

MEDICAL CERTIFICATE OF THE CAUSE OF DEATH.

DURATION.

Enlargement and hepatic venous congestion of liver - Many years probably.

Subacute arachnitis, with serous effusion and maniacal

excitement and depression of mind - - - Two months.

F. FRANKLIN, M.D., &c.

February 1st, 1854.

SAML. J. JEAFFRESON, M.D., &c.

After a short deliberation, the jury returned an unanimous VERDICT IN FAVOUR OF THE WILL; coupled with a recommendation that 1000*l.* should be given to Mrs. Kerslake, the sister. Mr. Baron Parke concurred in this recommendation. This case excited an extraordinary degree of interest in the county, and Sir Alexander Cockburn, Her Majesty's Attorney-General, was specially retained to conduct the case for the plaintiff.

We have now submitted to our readers an impartial *résumé* of the material facts of this interesting and, in regard to its medico-legal bearings, important case. After a further and more matured consideration of the evidence adduced during the trial, we retain the opinion we then expressed, that it was reasonable to presume that Mr. Roberts was not of sound mind on the 4th of October, the day on which he executed his will. It is quite immaterial to the question really at issue, *how* he left his property, whether in the *right* or in the *wrong* channel; not that we would undervalue such evidence when questions of this nature are *sub judice*. It was apparent, that the fact of his having bequeathed his property to his widow, was considered by the jury as strong *prima facie* evidence of disposing power on the part of the testator, and a conclusive proof that his feelings and judgment could not have been very much warped or disordered. But, in considering the case in its strictly psychological and scientific aspect, we must throw entirely aside all our natural sympathies with the widow, and consider exclusively the actual state of his intellect at the time he made a testamentary disposition of his property; in other words, the question for our consideration is: was Mr. Roberts of sound and disposing mind on Sunday, the 4th of October?

No unprejudiced person can read the evidence, particularly that relating to the *post-mortem* examination, detailed in the preceding pages, without being irresistibly drawn to the conclusion that the disease of the brain and disorder of the mind of which Mr. Roberts died on the 1st of Feb., had been for years creeping slowly and stealthily on in the delicate structure of the brain; giving rise in the first instance to waywardness of thought, acts of eccentricity,

extravagances of conduct, exaltation of natural disposition and character, and ultimately terminating in confirmed insanity. It was the object of the Attorney-General to establish that the alleged mental attack was one of transient *delirium*, accompanied by lucid intervals, and not of insanity; and that the delirium was evanescent in its character, and marked by clear and undoubted intermissions. He was presumed to have had, on the Sunday, one of these returns of sanity, or lucid intervals. But Mr. Roberts's attack presented none of the well-known and easily recognised symptoms of delirium, in the right acceptation of the term. His derangement of mind was not of sudden and recent origin. It was admitted that he was a man of temperate habits, and it would appear, by the questions that were addressed to Shepherd, that an attempt was made to convey to the jury an impression that the attack was one of *delirium tremens*, or a somewhat analogous affection, and not mental derangement, according to the legal signification of the term. The medical witnesses always allude to Mr. Roberts's attack as being one of delirium; but this notion is quite inconsistent with the progress of the case, its symptoms, and the morbid appearances found in the brain after death. Dr. Franklin attributed the whole of Mr. Roberts's mental indisposition to the state of his liver. He says, "I thought the disease of the liver produced the delirium." Of course this physician considered that the organic affection of the brain had nothing whatever to do with his patient's mental malady; that it played an insignificant and secondary part in the matter; and was so trivial and unimportant in its consequences, as to merit no consideration! Without going into further detail, such was the general tendency of the evidence of Drs. Conolly, Jeaffreson, and Taylor. Dr. Conolly based his opinion of Mr. Roberts's sanity and disposing power, on the Sunday, upon his condition on the subsequent Wednesday. He saw him on Tuesday; but from his state of mind on that day, he says he should not have inferred that he was sufficiently of sound mind *then* to make his will; but finding him so composed on the Wednesday, when he next visited him, he therefore concluded *that he was of sound intellect on the Sunday!* This certainly appears a singularly illogical mode of testing the sanity of the testator! Dr. Conolly might have found Mr. Roberts of perfectly sound mind on the Wednesday, and fully competent on that day to execute a complicated will, and make a just disposition of his property; but why he should have inferred, from his apparent or evident sanity on the *Wednesday*, that Mr. Roberts was in the *same rational state on the preceding Sunday*, is, we confess, inexplicable. His sanity on the Wednesday might, even if the character of the attack had been different, be quite consistent with a wild state of mental derangement on the Sunday. Admitting Dr. Conolly to have arrived

at a right opinion of Mr. Roberts's state of mind on the Wednesday, it does not in the slightest degree alter our opinion of his probable insanity on the Sunday. But let us for a moment consider what *was* Mr. Roberts's actual mental condition on the Wednesday, the day Dr. Conolly says he found him so tranquil, coherent, sane, and competent to make his will. If we are to believe the evidence of W. Alderton, J. Shepherd, and R. Smith, keepers who were employed to be with Mr. Roberts, we can come to no other conclusion than that even on *that day* he exhibited unequivocal symptoms of insanity. Alderton says that on Wednesday Mr. Roberts was in an excited state. He did not speak, but seemed as if he was going into an epileptic fit. Alderton, when he went to Mr. Roberts's house on the Wednesday, found him in charge of two attendants. It must be obvious that, whatever Drs. Conolly and Jeaffreson's opinions were as to Mr. Roberts's mental health on that day, his friends entertained a different opinion, and considered it necessary for his safety to place him under the care of two keepers! James Shepherd saw Mr. Roberts on the Wednesday, and, according to his sworn testimony, in what state of mind did he find him on that day? As his evidence is important we give it rather in detail:—

"He came again on the Wednesday evening between eight and nine. Smith had been there all day, and left when he got there. Soon after Mr. Roberts jumped out of bed, and Shepherd went round the foot to meet him. Roberts held his hands up, saying he hoped he had done nothing. Shepherd said nothing at all. He could not get him into bed again. He pulled the bell to get assistance. Roberts was in a state of nervous excitement. Alderton and Smith then came into the room, and they got him on the bed. It took Shepherd and Smith to hold him from half-past nine till twelve, when he became exhausted, and perspired very much. About half-past twelve he got quiet, and Alderton left. Smith laid down about one. Between one and two he got out and began to run round the bed on his hands and knees, crying, 'Oh! dear, oh! dear! I can't help it, I put 'em here.' 'Put what here?' I said. 'Two pegs,' he replied. I could not get him into bed, so I let him amuse himself. Smith got up between four and five, and we got him in. Mrs. Roberts came in just as we were trying to get him into bed, and touched him, saying, 'My dear, won't you get into bed.' He took no notice at first, but when he saw her he stood upright and ordered her out of the room. He considered Mr. Roberts's state to resemble that of *delirium tremens*."

Such being Shepherd's evidence of Mr. Roberts's state on Wednesday, what does Robert Smith say as to his condition on the same day? In the fore part of that day, Smith represents that Roberts talked about Prince Albert and the Queen, and said he was the only person appointed to hand the Queen from one carriage to another when she changed carriages. "When I went down to my tea," he continues, "I

left Shepherd there, and almost as soon as I got down the bell rang. I went up stairs, and found Mr. Roberts struggling with Shepherd. We got him into bed. He took two men to hold him in bed." In his cross-examination, this witness says "that on Wednesday night Mr. Roberts was very bad, and continued to get weaker, and was worse and worse during the whole time he was with him."* We have been anxious to give fully the evidence of Alderton, Shepherd, and Smith, because the whole value of Dr. Conolly's opinion rests upon his impressions as to Mr. Roberts's mental sanity on the Wednesday, for Dr. Conolly had no opportunity of seeing Mr. Roberts on the Sunday. Dr. Conolly says—

"From what I saw of Mr. Roberts on the Tuesday, and the remarkable change which I observed in him on the Wednesday, it is clear that he might have had such distinct changes before then, and he might have them after. It was not a slight change, but a very striking one; a complete change. From the change on the Wednesday I have no doubt he was fully competent to make his will on the Sunday before. From what I saw of him on the Tuesday only I should have doubted that."

In cross-examination, Dr. Conolly was asked the following question:—"From what you observed of his state on the Tuesday, from what you heard of his state on the Monday with reference to the chimney being on fire, and from what you have heard of his state on the Friday and Saturday, should you have considered that on the Tuesday he would necessarily be, or probably be, in such a state of mind as to be enabled to give instructions for conveying or disposing of real property to any one for life, and the whole, or a portion, to trustees on certain trusts, or to make complicated dispositions of his property in that way?" Dr. Conolly said,—*"I think that, on the Wednesday morning, when I saw him, he was perfectly competent to do what you mention."* In answer to a question from the judge as to his competency to make his will on the Sunday, Dr. Conolly said,—*"It appears to me that there is nothing so difficult in what you say; but he could have understood it on the*

* The same witness (Robert Smith) said, "On one occasion he (Roberts) was talking about a railway. He was calling out, 'Stop her!—stop her!' The perspiration rolled down his face. I have frequently heard him talk of a ship coming in at the window, which he said was loaded with gold. He called me a thief, accused me of stealing his clothes, and said, *I made a practice of bringing women there, and keeping them all night.* He said, one morning, that he could see people in the fire; that there was a monkey there smoking a cigar: he said Dr. Franklin had cut him to pieces, and took every nerve out of him; that he had taken his own senses, and his (Roberts's) too. He objected to the name of Dr. Franklin. When alluding to his having made a will in favour of his wife, he said, 'Never mind, Smith, I shall, one of these days, lay down, and tell you I am dead; but you are not to take any notice of it.'" He added: *"I shall order a cask of brandy, and let Mrs. Roberts have her fling at it, and I shall get my will back again. I made out that as a matter of form."*

Wednesday, and therefore I do not see why on the Sunday his condition should not be equally good."

If we are justified in attaching any weight to the evidence of Alderton, Shepherd, and Smith, there can be no doubt of Mr. Roberts's insanity on Wednesday; and if our readers come to this conclusion, and we cannot conceive how they can arrive at any other, the whole of the medical evidence for the plaintiff falls to the ground! Drs. Jeaffreson and Franklin saw Mr. Roberts with Dr. Conolly on Wednesday, but Dr. Franklin, in his evidence, makes no reference to his condition on that day. Dr. Franklin says that "on Tuesday I met Drs. Conolly and Jeaffreson in consultation, at Mr. Roberts's house. He knew both Drs. Conolly and Jeaffreson well, and shook hands with them. He afterwards got worse, and on the 8th or 9th (Thursday and Friday) he was rather violent. Dr. Conolly succeeded in persuading him to take medicine on the Tuesday, which temporarily relieved him; he took the medicine in the presence of Dr. Conolly. There was considerable delirium, requiring restraint, on the 8th or 9th, which subsided in the course of the day."

Dr. Jeaffreson, when speaking of Mr. Roberts's state on the Wednesday, says:—"I visited him on Wednesday, at the request of Dr. Conolly, &c. He was rather better. He appeared more conscious and disposed to enter into conversation than on the previous day. His mind was sufficiently clear to enable him to understand any act of business. He got much worse after the Wednesday." Dr. Jeaffreson agreed with Dr. Conolly that, as Mr. Roberts was so improved on the Wednesday, there was nothing inconsistent in the supposition of his being perfectly competent to make his will on the Sunday: but he makes this important admission, "*that a great deal would depend whether certain tests were applied to his mind on the Sunday, and on all occasions.*" Now, what is this evidence worth? Dr. Franklin met Drs. Conolly and Jeaffreson in consultation on the Wednesday; and he could have given valuable testimony as to Mr. Roberts's mental condition on that day; but he appears to fight shy altogether of the subject. Dr. Jeaffreson says that on the Wednesday, Mr. Roberts was "rather better," "more conscious," "more disposed to enter into conversation than on the previous day;" but surely all these changes were compatible with considerable unsoundness of mind, rendering him quite unfit to make a disposition of his property. In the absence of all proof that these physicians tested Mr. Roberts's mind, *as it should have been tested* before they ventured to draw any conclusions as to his sanity and disposing power, our readers will agree with us in opinion that the fair presumption is, that Mr. Roberts, on the day he executed his will, was of unsound mind. If the attack of insanity, which obviously existed on the Friday and Saturday, and that had been for months progressing

towards a crisis, *entirely subsided on the 4th of December*, with all its palpable manifestations that were observed on the two preceding days, only to recur again on the Monday, Tuesday, Wednesday, and until his death; if such a state of things *actually occurred*, in order to enable Mr. Roberts to execute his will in a sane state of mind on the Sunday, the insanity, we are bound to confess, was extremely facile, and very accommodating in its character!

We now proceed to lay before our readers another will case, many of its features analogous to the one previously discussed. We refer to the case of

THE DUKE OF MANCHESTER *v.* BENNETT, which was tried before Baron Parke, at the Spring Assizes, at Kingston, in the present year. The defendants were the three infant sons of Lady Olivia Ossulston, who, through their great-grandmother, the Right Hon. Lady Olivia Bernard Sparrow, endeavoured to set aside the will of the late Duchess of Manchester, made in October, 1848.

The late Duchess of Manchester was the daughter of General and Lady Olivia Sparrow, of Brampton Park, in the county of Huntingdon. By the will and codicil of her grandfather, Robert Sparrow, dated 1819 and 1820, certain estates in the county of Armagh, known as the Portadown estate, were devised to trustees to such uses as she (by her then name and description of his granddaughter, Millicent Sparrow) should by deed or will appoint, and in default of appointment, upon trust for her, to her separate use for life, and after her decease (but subject to any appointment she might make) upon trust for her right heirs. Up to the time of her marriage, which took place October 8th, 1822, this power had not been exercised, and on that occasion the Portadown estate, and other estates known as the Tandragee estate, became the subject of a settlement, dated October 3rd, 1822. By that settlement, the Tandragee estate was limited (subject to certain rent-charges therein mentioned) to trustees for a term of years, for securing pin-money to the late Duchess, and subject thereto to the use of the Duke for life, and after his death to trustees for a term of years, for raising 20,000*l.* by way of portions for younger children, and subject thereto, to such uses as the Duchess should by deed or will, and notwithstanding coverture, appoint. Power was also given to the Duke and Duchess to charge the Tandragee estate with 20,000*l.* for their own purposes; and by this settlement the Duchess exercised her power of appointment over the Portadown estate to the extent of limiting it to the use of the Duke for life. There were issue of the marriage four children, viz. Lord Mandeville, Lord Robert Montagu, Lord F. Montagu, and Lady Olivia Montagu, who afterwards married Lord Ossulston, and of which marriage the infant defendants were the issue.

It appeared that, previously to 1843, the Duchess had made two or three wills, but in that year she executed what was, in fact, her last will and testament, unless the one sought to be set aside were established. By the will of 1843, which bore date August 2nd, the Duchess created a term of 1000 years, for the purpose of raising an additional sum of 40,000*l.* for her younger children; and, after directing that the trustees should set apart a sum of 6000*l.* per annum (which by a codicil was afterwards reduced to 4000*l.*), as a fund out of which to liquidate certain charges and encumbrances on the estates, devised the estates to the use of her eldest son, Lord Mandeville, for life, with remainder to his first and other sons successively in tail male; and in default of such issue, then to the use of Lord Robert for life; then to Lord Frederick for life, with like limitations; and in default of such issue, to such uses as her daughter, Lady Olivia, should appoint, and in default of appointment, to Lady Olivia in fee; and the Duchess also directed that Lady Olivia's share in the portions to be raised should, in the event of her marrying, be settled upon her and her children, as therein mentioned. On the 3rd August, 1843, the Duchess executed a codicil, reducing the 6000*l.* per annum to be set apart to 4000*l.* This will and codicil were executed by the Duchess of her own mere motion, without any intervention on the part of the Duke.

The present issue was directed out of the Court of Chancery, for the purpose of trying the validity of the instrument made by the late Duchess, in October, 1848, the questions to be tried being, whether, at the time of the execution, the Duchess was of sound and disposing mind; whether she was aware of the contents of the instrument, and whether the same was executed by her under undue influence used over her by the Duke.

The will was as follows:—

“I, Millicent, Duchess of Manchester, wife of George Montagu, Duke of Manchester, do make this my last will and testament as follows:—I give all the real and personal estate of which, by virtue of any power, or authority, or of any separate right of property, I am competent to dispose, unto the said Duke, my husband, for his absolute use; and I direct and appoint that all real and personal estate of which I have any power of appointment or disposition, shall go to, and be held in trust for, my said husband absolutely; trusting, nevertheless, that he will carry into effect the wishes which I have expressed to him as to any general or particular disposition of any property; but this expression of my confidence shall not abridge his absolute ownership, or create any equity in favour of any of the objects of such expressed wishes; and I appoint my said husband to be executor of my will, and revoke all other wills.”

We purposely abstain from taking any notice of the personalities which were imported into the case on both sides, as having nothing to

do with the issue to be tried; and we shall proceed to give a brief outline of the evidence.

Sir F. Thesiger attempted to establish the validity of the will upon the following grounds: he observed that, in consequence of certain family reasons, the Duchess proposed making an alteration in her will of 1843, as she did not wish to leave her children independent of their father; and she expressed her wishes as to making such alteration to Dr. Verity, at Tunbridge Wells, in the summer of 1848. Dr. Verity told her that her intentions might be carried out by means of a power or trust, and she then said, "I must trust them all to the Duke, for if there was ever a true man, he is one." This conversation was afterwards communicated to the Duke, but he did not take any steps in consequence of it, till the Duchess spoke to him on the subject during her illness, as he said he observed there was something pressing upon her mind, when the following conversation occurred. The Duchess said, addressing the Duke, "Mandy" (short for Mandeville), "I do not like my will at all, or to leave any of my children independent of you." Whereupon the Duke said, "Would you like a will to be made, bearing on the face of it the carrying out of your wishes?" To this the Duchess assented. Mr. Beauford, the steward, was ordered to get such a will prepared, and Mr. Pearce, a most respectable solicitor, was applied to, and he made a draft will, with blanks for the names, which were afterwards therein inserted. We will not stop to inquire why it was that the Duke's own solicitor, who lived only sixteen miles off, was not applied to, nor to the hurry there was when interests of such magnitude were to be disposed of, which occasioned some severe comments from counsel at the trial. But to proceed: the will was dated October 26th, but Mr. Pearce proved that Mr. Beauford did not call on him till October 27th, and it therefore (as proved by the evidence) could not have been signed till October 28th.

It was executed in the following manner. The Duke asked Dr. Verity whether he considered the Duchess to be in a fit state to transact business, whereupon Dr. Verity went to her room, and said to her that "there was a little business to transact, if her grace felt equal to it." She answered, "Oh, the will, I suppose;" and desired to sign it at once. Dr. Verity then retired, and returned to the room with the Duke and Mr. Beauford: the Duke, having introduced Mr. Beauford, withdrew. Faravel, the lady's-maid, was in an adjoining room, the door being open, so that she could hear the scratching of the pen, and the sound of voices. The Duchess shook hands with Mr. Beauford, and asked after Mrs. Beauford and the children. Mr. Beauford then read the will aloud, and asked the Duchess whether she required it to be explained? she answered, that it had been read over to her on the previous day, and she proposed to execute it. The Duchess then signed

it, she being in a recumbent position; and, as Dr. Verity said, "her hand shook, and she said to him, 'I think you must help me.' " Dr. Verity then steadied her hand, and slightly raised her, and she a little raised herself, and said, of her own accord, "I deliver this as my act and deed." The will was then attested by Dr. Verity and Mr. Beauford, and Dr. Verity said, on leaving the room (as asserted by Faravel, but denied by himself), "Now, Faravel, you must say nothing about this." In the afternoon of the same day, the Duchess took Dr. Verity's hand, and said that "she hoped God would bless what she had done."

Dr. Verity stated that the Duchess gradually recovered from the attack of October 1st, and was at length able to converse on any subject which he chose, or which she chose, and that the Duchess's best time was between the 21st of October and 12th of November. He further stated, that about a fortnight before her death, which took place on the 21st of November, 1848, she addressed her children for about a quarter of an hour, in an exhortation to do good, in such a manner that it could only have emanated from a sound mind, guided by Christian principles. The Duke also stated that he was in the habit of reading the Scriptures and prayers and hymns to the Duchess, and that she appeared to be perfectly conscious of the solemnity of the service.

The following was the theory of the Duchess's disease, as given by Sir F. Thesiger:—

The Duchess was attacked, on Sept. 12th, with hysteria, accompanied with strong convulsions; that she recovered from this attack, and was again seized with convulsions on October 1st. He admitted that she laboured under acute mania, followed by inflammation of the brain, and that unsoundness of mind existed for some days after the attack; that ulceration of the bowel, with diarrhoea, supervened, which relieved the brain, so that, as the one disease increased in severity, the other became mitigated, and terminated fatally in mortification of the bowel. He also considered that the delusions under which she laboured were the effect of opium, which was prescribed to allay the symptoms, and that they were not the result of disease of the brain.

The case of the Attorney-General, in opposition to the validity of the will, rested partly upon facts relative to the disease under which the Duchess laboured; and partly upon the opinions of medical men upon such facts.

Mrs. Kerr, the nurse who attended the Duchess, said that she, the Duchess, was attacked at Brompton with epileptic fits, on Sept. 12th; and that she was much convulsed, and remained unconscious for three days; that she was removed home to Kimbolton on September 26th; and that on October 1st she was again seized with epilepsy of a much more violent character; that the fits lasted several days; that there

was striving and struggling, so that she was obliged to be held, and that the violence was so great that the parts of the body where she was restrained were observed to be black after the paroxysm had subsided; that she raved for days incessantly; that she then became unconscious, and lay quiet; that she gradually got better; that sometimes she would be rational for half an hour together, at other times she would not know what she had done half an hour before. That she had various delusions: upon one occasion she said (speaking to the Queen as if present), "Does it not occur to your Majesty that the Duchess of Manchester is in the room?" She said this on or about October 21st. She also laboured under the delusion that she was pregnant, and spoke to the nurse as if she were a midwife. She ordered baby-linen, and nursed the pillow as if it were a child. This delusion came on after the fits subsided, and lasted to within a fortnight of her death. She was directed by Mr. Hurst, the medical man, not to undeceive her as to the baby, as the Duchess took more nourishment in consequence of the idea that she would be better able to nurse the child. That she laboured under many other delusions, and was never free from them, during the whole of the illness, for twenty-four hours together. That the fits recurred from time to time. That the memory was much affected; and at times she did not know where she was, nor where she had been. That she had sores on the calves of her legs, back, and stomach, and an abscess on the side and shoulder; but that she did not complain of pain.

Faravel, the lady's-maid, stated that the fits came on with great "fixity;" that the Duchess foamed at the mouth; that the muscles of the face were drawn and convulsed, and that she afterwards became insensible. That sometimes the Duchess would be sensible for half an hour or an hour at a time; but that, up to the time of her death, she was never twenty-four hours free from wandering of the mind.

The Duchess had many visions after the second attack, and very often had delusions. She said upon one occasion, that she had been in the presence of God and the angels. Upon another occasion she fancied the house was on fire. Sometimes she fancied that she, Faravel, was a man, and that she had a coat and trousers on. At other times she said that she (Faravel) was in the familyway. Once she thought she was in a beautiful garden, which she described. These delusions would come on all at once, without warning, day and night. The Duchess was very violent after the second attack (October 1st), and could not be kept in bed. Her screams were heard in the middle of the park. Her memory was much affected. At Brompton she forgot that she had been in London; at Kimbolton, that she had been at Brompton. On the day she signed the will she was quiet, but very

weak ; and she laughed when Dr. Verity and Mr. Beauford left the room.

Lord Robert Montagu said, that one day, after the attack at Kimbolton, when he was reading Shelley's "Prometheus Unbound" to his mother, that she suddenly said, "Is it true that Mandeville has made a low marriage, and has got a family?" Upon another occasion she asked him whether he had married the housemaid.

We will now consider the medical evidence. Dr. Verity and Mr. Hurst were subpoenaed by the party who supported the validity of the will ; Dr. Evanson, Dr. Mayo, Dr. Conolly, and Dr. Sutherland were subpoenaed by the opposite side, and Dr. Meryon was subpoenaed by both parties.

We may premise that the Duchess of Manchester's health had for many years been delicate, and she had been recommended to pass the winter in a warmer climate, on account of disease of the lungs. In 1836 she was attended by Dr. Verity, at Nice, where she had an attack of an epileptic character. In 1844, we have the evidence of Dr. Evanson, who wrote several letters, in the months of August, September, and October of that year, to Lady Olivia Sparrow, respecting the illness under which the Duchess then laboured, and from which it appeared that she was attacked with influenza, accompanied with pleuritis and pneumonia, and succeeded by fever, with congestion of the brain, the symptoms being confusion of thought, numbness of the hands, and affection of vision, for which active medical treatment, with blisters to the head, was had recourse to. This attack left the Duchess a confirmed invalid, so that she required constant medical supervision during the remainder of her life. In 1848, Dr. Verity stated that he saw the Duchess at Tunbridge Wells, where she remained about a month, and that she was then suffering from gastric derangement, and he attributed her illness to the misconduct of one of her sons. She returned to London, and was seen by Dr. Meryon, who found her suffering from dyspepsia, and then she proceeded to Brampton, the residence of her mother, and while there, on Sept. 12th, was attacked, according to Dr. Verity, with hysteria, the functions of the brain being in abeyance for several hours, and, according to Mrs. Kerr and Faravel (as we have already stated), with fits, accompanied with foaming at the mouth, convulsions of the muscles of the face and body, followed by insensibility of three days' duration.

On September 26th, she was removed home to Kimbolton, and on October 1st, she was again attacked with epilepsy. Mr. Hurst, who saw her on that day, and who slept in the house every night till October 29th (the day after the will is supposed to have been signed), said that he found the Duchess extremely excited ; that convulsions suc-

ceeded each other in rapid succession, and continued during the night, followed by complete insensibility, which lasted for three days.

On October 2nd, we have the valuable testimony of Dr. Meryon, who states that he found the Duchess suffering under acute mania, with occasional paroxysms of terror and agitation, as if she were under the apprehension that some one was present who was about to injure her, as she was constantly crying out, "There he is! there he is!" Antispasmodics and sedatives were prescribed, and the patient was ordered to be kept extremely quiet.

October 3rd, Dr. Meryon thought that there were symptoms of inflammation of the brain of a mild character, which promptly yielded to the abstraction of ten ounces of blood from the arm, after which the symptoms of terror ceased.

October 4th. Hæmorrhage of the bowel occurred.

October 5th. The Duchess was slightly improved, and Dr. Meryon was able to take his leave.

October 7th. Mr. Hurst stated that he found the Duchess lying in a state of stupor.

October 9th. Dr. Meryon returned, and found his patient in a state of prostration from diarrhœa, he also found much irritation of the bowels, and he stated that he thought that the brain-affection may have been masked by the bowel-affection, and that the diarrhœa might have relieved the head symptoms, as on October 10th she was more composed. On this day paralysis of the rectum occurred, and the Duchess became unconscious of the calls of nature, and remained so to the day of her death.

On October 11th, the mind was quiet, and there was not the same disposition to ramble in conversation; the Duchess was able to answer one or two questions properly when spoken to, but he refrained from questioning her on the subject of her delusions, as he thought that he might go a step too far, and bring back all the mischief. He left Kimbolton on this day, and during the time of his attendance he considered that the Duchess was incapable of making a will, or of transacting any business.

October 12th. Mr. Hurst was called up at night, and found his patient violent and excited. She afterwards became unconscious, not in his opinion from symptoms of apoplexy, but from exhaustion.

October 13th. The excitement returned, and was as bad as ever.

October 14th. There was still great excitement and violence, with incoherence in the conversation.

Mr. Hurst stated, that this was the last day of great excitement, although it returned afterwards in a less degree. He also stated that the Duchess laboured under delusions. Upon one occasion, she fancied

that the house was on fire; upon another, she thought that she had been delivered of a child. The state of her memory, in his opinion, varied; she was capable of making a trifling mental exertion, and almost invariably gave pertinent answers to his questions respecting her health. She was, however, at times reluctant to answer. He considered that voluntary motion was impaired, not lost; there was paralysis of the rectum, an ulcer on the back, and a sphacelating sore which made its way into the rectum, which, in any other person, would have occasioned considerable pain, but the Duchess did not complain of pain. She died of mortification of the bowel.

This concludes the evidence of the witnesses who had seen the Duchess during her lifetime.

Dr. Mayo, Dr. Conolly, and Dr. Sutherland, were called to give their opinion upon the evidence which they had heard in Court.

They concurred in the opinion that the attack of fever, with congestion of the brain in 1844, had left the brain liable, upon a sufficiently provoking cause, to a renewed attack.

That the symptoms detailed by the witnesses of the disease at Brampton and Kimbolton, in September and October, 1848, indicated the presence of constant disease in the brain throughout the period; they referred especially to the symptoms of impaired memory, of the insensibility of the nerves of sensation, and of the unconsciousness of the calls of nature. That paralysis of the rectum would not, taken by itself, account for the unconsciousness to the calls of nature, as, although it would prevent the power of retention, there would still be a consciousness of what was taking place, if the brain were in a healthy state.

That the insensibility to pain, considering the nature and extent of the sores, was indicative of disorder of the brain of a serious character.

They considered that the disease in the brain was the primary disorder, and that it was complicated with, and was not the result of, disease of the bowels. That the case was one of acute mania, terminating in chronic mania; and they considered that there was organic disease of the brain, from the fact of the disease being accompanied by epilepsy, from the impaired state of the memory, from the insensibility to pain, and from the unconsciousness of the calls of nature.

They considered it improbable that a person suffering under such a disease would have been able to transact any business requiring thought and reflection, or to take into consideration the circumstances connected with her property, the claims of relatives upon her, and, in short, to do anything that required a continuous process of thought and attention; and they said that they would not have witnessed a will under the circumstances, without having first tested the state of

mind of the patient as to the extent to which the memory was impaired, and as to the presence or absence of delusions.

They considered that the conversation of the Duchess with Dr. Verity at the time of signing the will, was quite compatible with a state of unsoundness of mind, and that this was the reason for their considering that it was the more necessary that the mind should have been tested before the will was witnessed; for they stated that a person might be aware of the fact that a will had been read, might know that he was signing that will, and might even speak about it, and yet might have a diseased mind, with delusions lurking in it.

Dr. Conolly illustrated this fact by mentioning the case of a gentleman who would pass a whole evening in society, and make himself very agreeable in conversation, while, at the same time, there was the delusion latent in his mind that he was at the point of death, and upon taking leave of Dr. Conolly, he would always desire him to order his coffin to be ready for him next morning.*

Dr. Mayo having been asked as to the necessity of testing the mind under such circumstances, said, that he would not give much for the opinion of a medical man who, with such symptoms before him, could say that he paid no attention to the delusions.

We have confined ourselves strictly to that part of the evidence which tended to elucidate the state of mind of the Duchess at the time she made the disputed will. We have passed over those grave charges of undue influence brought against the Duke, which were not proved; and we abstain from commenting upon the conduct of the Duke as to the limitations contained in the settlement made in 1852, and as to his not having carried out the intentions of the Duchess, who only contemplated a disposition of the property in favour of her own children; and not to the heirs male of the second marriage in preference to the children of Lady Ossulston, the disputants in the present action. What we have to consider is, that part of the evidence which tends to show what the disease was under which the Duchess laboured; and whether, in consequence of such disease, her mind was so unsound as to have prevented her from making a proper disposition of her property.

We have to consider the theory of Sir F. Thesiger, who admitted the existence of acute mania during the early part of the disease, but stated that as the disorder in the bowels increased that of the brain became mitigated, so as to leave the mind in a sound state at the time when the will was made; and who attributed the delusions to the opium prescribed by the medical men.

* Compare this evidence with that given by Dr. Conolly in the preceding case of *Roberts v. Kerslake*.

We have, further, to consider the suggestion of Vice-Chancellor Page Wood, as to whether the wanderings of the mind did not partake rather of the nature of delirium than of delusion.

And lastly, we have to investigate the opinion of those who attributed the aberrations of the mind to acute mania.

First. As to Sir F. Thesiger's theory. It appeared from the evidence that an alteration in the symptoms did take place after the acute stage of the disease had passed off, the paroxysms of excitement yielded to exhaustion, the incoherent rambling to delusions which never left the Duchess's mind to the day of her death; considering the great prostration of strength from the hæmorrhage, the diarrhœa, the paroxysms of violence, and the discharge from the sores, it was not surprising that the Duchess was more quiet in the later than in the earlier stage of the illness; and it appeared that, counsel not being able to deny the fact of the existence of delusion existing daily throughout the illness, when complete insensibility and incoherence were absent, very ingeniously attributed it to the effects of opium. It was not stated in evidence in what doses the opium was administered, whether in stimulating or in sedative doses, but we have seen a copy of a letter written by Dr. Meryon to Dr. Evanson, wherein it is stated that the opium was prescribed in sedative doses with astringents, and, therefore, the stimulating effects of the drug could not have produced the delusions; but, further, the delusions were not of the character of the fleeting phantasies of the opium-eater, so that we do not consider it necessary to dwell longer upon the subject.

We pass then to the consideration of the Vice-Chancellor's suggestion. Were these wanderings of the mind the effect of fever? Dr. Meryon certainly stated that the Duchess, in the early part of October, had an attack of inflammation of the brain, but he said it was of a mild character, so much so indeed, that he only abstracted ten ounces of blood once from the arm; and this appears to have subdued the inflammatory action, which must have been very slight, for there is an absence of symptoms of encephalitis in the Duchess's case. We have no evidence of the intense, and deeply-seated pain in the head, the intolerance of light and of sound, the contracted pupils, the hard pulse, and the parched skin, so that the wanderings could not have been the effect of encephalitis; but were they of continued fever? Was the attack of 1848 a recurrence of that of 1844, in an aggravated form? We think not; for the wanderings spoken of in the evidence differ not only in degree, but also in kind, from delirium; they appeared indeed, to the medical men who saw the Duchess during her illness, and those who gave an opinion upon the evidence, to be the symptoms common to mania. Indeed Dr. Meryon was clearly of

opinion that the disease was one of acute mania, supervening upon a slight attack of inflammation of the brain. We come, therefore, in the last place, to consider how far the opinion expressed by the medical men was borne out by the evidence: we do not include that of Dr. Verity, as he was placed in a peculiar position as an attesting witness to the will, and as a friend of the family.

We have seen that the brain had been seriously affected in 1844; there had, indeed, been frequent blisterings of the head, both before and after this attack, and prior to that of 1848; the brain therefore was in a state more liable to be attacked, either primarily or secondarily, by disease, than a healthy brain. We must not omit to mention that the Duchess had suffered under much anxiety of mind, on account of the misconduct of one of the members of her family; and that this produced much mental depression, we learn from the Duke, who said in his evidence that the first symptom which he observed, was a feeling of dread as to the state of her soul, and that the Duchess begged not to be left alone; this mental anxiety, coupled with the predisposition in the brain, above referred to, appears to have produced the severe attack of epilepsy on Sept. 12th, followed by the more severe one on Oct. 1st, and as so often happens, mania, accompanied by violent paroxysms, supervened. There can be little doubt what the disease in the brain was, the only doubt that can arise is, of what character the attack of mania was; whether it was continued, remitting, or intermitting; and whether, if the latter, the will was signed during a lucid interval.

There were great variations in the symptoms, and the more prominent points of the case are not difficult to discern. When the witnesses speak of convulsions and foaming at the mouth, followed by insensibility, we know what they mean; but when they come to the more delicate shades of description, and say that the Duchess gave rational answers, when she merely answered the questions put to her concerning her health, using the term rational, not as implying that the answers were an emanation from a rational mind, but merely that they were answers to the point, and were therefore mere proofs of consciousness, and of the mind not wandering at that particular moment, and upon that particular point; when also such terms are used by a foreigner (Faravel was a Swiss), it becomes the more difficult to draw a correct diagnosis between a remission and an intermission of the disease. We find that the Duchess was never twenty-four hours free from delusion, during the whole of the illness, when she was not either unconscious or incoherent, and the remissions or intermissions of the disease were stated to have lasted from half an hour to an hour; but it may well be questioned whether these intervals were not proofs

of absence of excitement, and not of total absence of disease, which is the indication of a lucid interval. But this is rather a matter of curiosity for medical men to speculate upon, than for the lawyer to adduce as proof that there was, at the time of making the will, a disposing mind; for in this case, it having been demonstrated that there were delusions of daily occurrence, the burden of proof lay with those who supported the validity of the will to show that they were absent at the time that the will was signed; but this was not done, for Dr. Verity confessed that he was either ignorant of, or that he paid no attention to, the delusions; and he admitted in cross-examination that "you could not at all times have said that the mind might not have wandered if anything excited by emotion, or much mental exertion."

The Jury found a verdict for the plaintiff, thus establishing the will; but the Attorney-General on the 9th of June, moved for a new trial, on account of misdirection of the Judge, and because the verdict of the jury was against the evidence.

The Vice-Chancellor granted a new trial, but we understand that the matter has recently been compromised by the Attorney-General and Sir F. Thesiger.

We now proceed to a consideration of the case of Mrs. Brough, who was tried at Guildford, for the murder of her six children. The subjoined is the evidence adduced during the painful investigation:—

Henry Woolgar: I am a labouring man, and reside at Esher. On Saturday morning, the 10th of June, about a quarter to six o'clock, I was passing the prisoner's cottage, when I saw a pillow, covered with blood, hanging from the window of one of the rooms. A man named Peastly came up, and he rang the bell of the cottage. No answer was given, but I fancied I saw a shadow of some person moving in the house. I got a ladder and placed it against the window, and ascended it, and looked into the room. I then saw the prisoner standing at the top of the staircase, and I saw that her throat was cut, and her hands and face were covered with blood, and her hair hung about her face. She was making a whistling noise, apparently from the wound. I descended the ladder and went for a doctor, and when I returned I saw the prisoner lying on a bed in the house. The prisoner appeared to be waving a towel or a cloth in her hand when I first saw her, and she seemed to desire to obtain some assistance. The prisoner knew me by name, and I recognised her, although she was so much disfigured. The blood was spurting from her throat. I cannot say whether the whistling sound was caused by her endeavour to speak. The window where the pillow was placed was the one that a person in the cottage would come to who wanted assistance from the public road. I heard a noise in the house as though some person was walking about down below, and when I

ascended the ladder the person came upstairs close to the window. I have frequently seen the prisoner with her children, and she always appeared to be very good and kind to them.

John Crockford said: I lived about twenty yards from the prisoner's house, and I was in my garden on the morning in question. In consequence of something I heard, I went to the cottage and ascended the ladder the last witness had placed there. I saw the prisoner lying on the bed, and I got in at the window and saw one child (William) lying on the ground with his throat cut. In another room I saw two other children with their throats also cut. The prisoner was lying on a bed in the same room. Upon going down stairs I found the front door half open. In another room I found three other children, all with their throats cut and quite dead. While the prisoner was on the bed she moved her hand and nodded her head, but she did not attempt to speak. Several other persons were in the house when I went in. The first child I saw was lying in bed in a little side room. He was dressed in his night clothes. In the room where the prisoner was there were two children: they were lying on the bed in their night clothes. The prisoner was lying on the same bed and almost touching them. When she saw me at the window she nodded her head at me, and moved her hand as if asking for assistance. The other three children were lying on one bed and undressed. I did not notice any blood on the bolt of the front door. The prisoner always seemed very kind and attentive to her children. The prisoner had a shawl over her shoulders. I cannot say whether she was dressed or not.

William Bidser said: I am constable of the parish of Esher, and in consequence of information I received on that morning, I went to the prisoner's house. I saw all the dead children and the prisoner. She had her night dress on. I asked her if she knew me, and she said "Yes." By the side of the bed on which she was lying there was a razor with dry blood upon it. The razor was on the same side of the bed as that on which the prisoner was lying, and it appeared to have dropped from her hand. I did not observe any clotted blood at her nostrils, but her face and breast were covered with blood. I have known the prisoner for some years, and lived about two hundred yards from her, and I considered her as good a mother as ever lived. She kept her children well dressed and clean, and acted in every way like a mother.

Mr. Superintendent Biddlecomb said: I went to the cottage of the prisoner on June 10th, about eleven o'clock. I had known her before. When I went in I saw a boot of a female saturated with blood, and the bolt of the front door was also bloody, apparently as if it had been drawn back by a bloody hand. Upon going up stairs I saw the dead bodies of three of the children in a small bedroom. All these children had their throats cut, and the girl also had a wound on her shoulder. I found the prisoner in another bedroom. She was alone at this time, the dead bodies of the children having been removed. She was in bed and persons were attending upon her. I asked the prisoner if she wished to speak to me, or if there was anything she requested, and she said, "No." I gave the necessary direc-

tions and left the house, and returned on the following day, and I was then told the prisoner wished to see me. I went to her and told her who I was, and she said she had been telling an officer all about it, thinking that she was speaking to me, but as I was come she should like to tell me all about it. I begged of her to be careful what she said, for it would be my duty to take down everything she said, and produce it in evidence against her. I cautioned her a second time, but she persisted in making a statement, which I took down in writing. On the following day I saw her again, and I told her I wished to read over to her what she had stated on the previous day, and I said I should do so steadily, and if there was anything she wished to retract, to do so. I at the same time told her that the coroner's jury would assemble that afternoon, and I should lay her statement before them. I then proceeded to read the statement to her, and when I had concluded she said it was perfectly correct, and she was prepared to sign it, and she did so in the presence of Dr. Mott, the medical attendant. She made no observation after she had signed it, except that, if she had left anything out the other officer could tell me. I took the statement originally in pencil, and it was copied afterwards in ink under my superintendence. I have not got the original, but I swear I made a verbatim copy of it. I am not aware of any one having seen the pencil writing except myself and the person who copied it.

The statement was then put in and read. It was as follows:—

STATEMENT OF THE PRISONER.

“On Friday last I was in bed all day. I wanted to see Mr. Izod. I waited all day, and wanted him to give me some medicine. In the evening I walked about, and I then put the children to bed, and tried to go to sleep in the chair down stairs. That was about nine o'clock. Georgy (meaning Georgina) kept calling for me to come to bed. They kept calling to me to bring them some barley-water, and continued calling till near twelve o'clock. Then some of them went to sleep. I could not rest. I had one candle lit on the chair. I could not see, and I went and got another candle, but still could not see. There was something like a cloud over my eyes. I thought I would go down, get a knife, and cut my own throat. I could not find my way down. I groped about in master's room for a razor. I could not find one. At last I found his keys, and then I found his razor. I went to Georgy and cut her first. I did not look at her. I then came to Carry and cut her, then to Henry, he said, ‘don't mother.’ I said I must, and did cut him. Then I went to Bill. He was fast asleep. I turned him over. He never woke. I served him the same. I then nearly tumbled into this room. The two children here, Harriet and George, were awake. They made no resistance at all. Harriet struggled very much after I cut her, and gurgled for some time. I then lay down and did myself. I can't tell you what occurred for some time after that, till I seemed weak, and found myself on the floor. That nasty great black cloud was gone then. Then I was thirsty, and I got the water-bottle and drank. I fell in a sitting position. I sat a little while, and got up and saw the children, and it

all came to me again. I wished to call, but could not speak. I did not know what to do. I went to the window, and put something out to attract attention. I staggered back to my own bed, and lay till I heard the ringing of a bell. They made such a noise. I got up, and went on my hands and knees to the window. I could not make him understand nohow in the world. It was Henry Woolgar. I went down to unbolt the door. There was only one bolt fastened. I undid that. They can tell you the rest." The prisoner was able to articulate distinctly, with the exception of the whistling in her throat. She had a difficulty in speaking, and she was obliged to pause occasionally for breath. She was about ten minutes or a quarter of an hour making the statement. I did not put a single question to her. The whole of this statement was perfectly voluntary. Collett was the first constable to whom she made any statement. He was in attendance before the coroner, but was not examined. I am sure I took down the very words she spoke.

Inspector Martell, of the Surrey constabulary, said:—I took charge of the prisoner on the Sunday after the occurrence; and while I was sitting by her bedside she began to cry, and I told her not to do so, as it would hurt her. She then said, "See what I have done." I said, "What have you done?" and she replied, "You have seen it, and know all about it." She was then silent for about a quarter of an hour; and she then inquired when the jury would sit on the children, and I told her the next day. She then said to me, "Then you may tell them that I did it." I told her to remember I was not asking her any questions, and she went on to make a statement. (It was precisely to the same effect as the one made to Mr. Biddlecomb, the only additional fact being, that the prisoner said that, "if there had been forty children she should have done the same; what a pity it was she had not done herself first.") She further said, that on the morning after—she supposed she had been asleep—she for the first time knew what she had done, and added, "Oh, horrid, horrid sight!" and she went to the window and put out a pillow to try to get assistance, but no one came. After the prisoner had made this statement, she said to me, "You are Mr. Biddlecomb, are you not?" I told her I was not, and she might have observed the difference in our uniform; and she replied, that she did not pay much attention to uniform, and she supposed it did not matter. She afterwards expressed a wish to have the statement taken down in writing, but said she should like to have a sleep first. Mr. Biddlecomb arrived shortly afterwards, and I told him what had occurred. I don't know whether the prisoner had a sleep or not before she made the statement to Mr. Biddlecomb. I did not take the prisoner's statement down, but trusted entirely to my memory. I have never said before to-day that the prisoner told me to tell the coroner's jury that she had done it. I have seen a portion of my evidence in the newspapers, but it has never been given in full before to-day. The prisoner did not tell me the exact time when it occurred, but said she supposed it was about twelve o'clock at night.

Mr. Charles Mott, surgeon, of Walton-on-Thames, said:—I have occasionally attended the prisoner professionally, but at long intervals.

I saw her on the morning of the 10th June about seven o'clock. She was lying on a bed. There was a large incised wound in her throat, and her windpipe was about two-thirds severed. She knew me, but was unable to speak, and she nodded her head. The injury in her throat was such as might have been inflicted by the razor that has been produced. I saw the bodies of the children, and I am of opinion they must have been dead for several hours. They were nearly cold. The wound on the prisoner's throat must have been inflicted some time, as the hæmorrhage had ceased, and she had recovered from the fainting which must have followed the infliction of so serious an injury. Mr. Izod is my partner. From the position of the children, I do not think any of them moved at the time the fatal injuries were inflicted, except one.

Peter Thomas Collett, a police constable, said:—The prisoner was partly under my charge from the 10th to the 29th of June. I searched the house, and found a bunch of keys and an empty razor-case. On Sunday morning, the 11th, the prisoner told me that the clock would not want winding up until ten o'clock, as she had wound it up at ten o'clock the night before. On the 13th, the prisoner said she wished her daughter Mary had come, and she told me to take a box from under the bed, and I did so, and found it contained plate and jewellery. On the top of the box there was a piece of paper, and when I took this up, the prisoner said, "I thought not of doing of it until Friday night."

The paper was read; it was as follows:—"All for my daughter Mary. Her father is only seeking to get money from them as never injured him or done him any harm, so help me God.—MARY ANNE BROUGH."

Examination continued.—On the same day the prisoner said, "This would not have happened but for my daughter and Fred. Foster. It is owing to a letter which they said they found and copied, and they took the copy to Kingston to Mr. Jemmett." The prisoner told me that this occurred three or four years ago, and Mr. Jemmett told them he could do nothing in it, as they had only got a copy of the letter. The letter, she said, was sent by a person named Woodhatch. That person has since left Esher. The prisoner also told me that Brough wanted to be parted from her. A woman, named Weller, who acted as nurse, was present when these conversations took place. She told me that this woman wanted to know the secrets of her heart, and I directed her not to put any questions to the prisoner. I put down in writing what the prisoner had said to me. (The witness handed in the paper.) The prisoner told me that if the doctor (Mr. Izod) had come, it would not have happened, and she said she wished she had taken his advice, as it would have been a great deal better for her. During the night she repeatedly asked for her children, and called out "Billy." She also asked whether it was her child that was crying. This was on the 11th of June. No child was crying when she made the inquiry, and everything was quiet. The prisoner did not say when she put the paper into the box, and all she said was, that she did not think of doing it until the Friday night.

Sarah Weller said:—I attended upon the prisoner while she was suffering from the injury of her throat. I took the prisoner some brandy and tea on the morning of the 10th of June, and I asked her if any of the children cried, and she said, "No, they were all asleep except the baby, and he was awake, and fetched three struggles." She then said that her husband had left her without money, and he was going to take the children from her, and she meant he should not do so. I will swear I did not put any questions to the prisoner except the one I have mentioned. I am not aware of the prisoner having complained to Collett that I wanted to get at the secrets of her heart. Collett did not caution me and tell me not to put any questions to the prisoner. It was on the Saturday morning that the prisoner said this to me. The doctor had only just sewn up her throat, but she was able to speak quite as distinctly as usual. I have never had any quarrel with the prisoner. I will not swear that she did not say to me "Get away." She had an apoplectic fit about a year and a half ago, and lost the use of one side, and since then the prisoner has not spoken so distinctly as she did before. She has constantly complained to me of her head since she had the fit, and she has told me that she felt a heaviness in her head—a "tumbling" like when she was stooping, as if she must fall, and a swimming. She had this fit after the birth of her last child. I was fetched to her one night, and I found she had suffered a great loss of blood from her nose. She appeared relieved in her head after the discharge of the blood. All this occurred before the birth of the child I have mentioned. The prisoner has suffered in the same manner since; but I have more particularly observed an alteration in her since she had the fit. I have frequently seen her laugh in a silly manner, and I observed a great alteration in her after she had the fit. The prisoner was always very kind to her children—almost too kind. She was a most indulgent mother. She has frequently complained of violent pain in her head over the eyes. I cannot say exactly when my attention was first attracted to the prisoner bleeding at the nose, but I believe it was shortly before the birth of the last child. Mr. Izod was called in to attend her, and she was ill for several days. She suffered a good deal during her last confinement. The prisoner never spoke so well after she had the fit as she did before.

Frederick White said:—I was at the prisoner's house on Friday afternoon, the 9th of June, to take home a tub for my uncle, who is a cooper. One of the little boys was in the garden, and he called the prisoner, and I gave her the bill for the repairs of the tub. She told me that Mr. Brough would be sure to call and pay my master, whoever he was, when he went to the mill. I did not see anything particular about her at this time.

William Limerick, a beerseller living near the prisoner, proved that on the same Friday morning he saw her in the garden, apparently engaged in pulling weeds. He did not see her for more than three or four seconds, and was unable to state whether there was anything extraordinary in her appearance or not. Witness always remarked that she was a very kind and affectionate mother, and her children appeared to be very fond of her. She was constantly in the habit of sending for

cakes and such things for them, and he believed she sent for some biscuits for them on the day before. The children had been ill of the measles, and were scarcely recovered at this time.

Henry Field said he was acquainted with the prisoner's husband, and he went in the same train with the prisoner, by his direction, on the Monday before this occurrence. He saw the prisoner in London in company with a man, and on the following day he communicated what he had seen to the prisoner's husband, and accompanied him to his attorney, who gave him some advice; and, to the best of witness's knowledge, he never afterwards returned to his own house.

John Birdsey, a publican at Esher, deposed that on the evening of the 7th of June the prisoner's husband came to him, and he accompanied him to his own house. He rang the bell, and the prisoner looked out of the window and asked him what he wanted, and she added that she understood he was going to sleep at the "Wheat Sheaf." He said he was, but he wanted his nightcap and nightgown. Shortly afterwards the prisoner came down and put a bundle over the gate, and Mr. Brough took it up and went away.

Annie Yates deposed that the prisoner was her aunt, and she resided near the prisoner and her husband. They had been married nearly thirty years, and had a numerous family. Several of their children were dead. A young man named Foster "kept company" with the eldest daughter, Mary. The prisoner was forty-two years old. She said she last saw the prisoner before the occurrence on the Friday it happened. She then appeared very tired from having to sit up with her children. The prisoner repeatedly complained of her head. Three of the children were very ill with measles at the time. The prisoner frequently complained of violent heaviness in her head over the eyes, and she was relieved when she had bleeding at the nose. She appeared to suffer a great deal more after the birth of her last child. Her speech was so much affected that at times she could not speak at all.

Mr. Izod was then called. He said that he practised as a surgeon at Esher, and he had attended professionally upon the prisoner for several years. In 1852 she suffered from severe bleeding at the nose, and she also complained of great pain in her head, and he found it necessary to administer powerful medicines and also to blister her. In September, 1852, she was delivered of a child, and eight days afterwards she was attacked by paralysis, and completely lost the use of her left side. She also lost her speech, and her face was distorted. She gradually recovered, but never entirely regained her powers, and he observed symptoms of a disordered brain. In consequence of this, he said, he constantly advised her to avoid excitement of every description, and he felt satisfied that any sudden excitement would be dangerous to her. The witness said that he saw the prisoner on the Wednesday before the fatal occurrence, and from her appearance he was induced, then, to caution her strongly not to excite herself. He did not think it necessary to give her any medicine on this day, because there were not any new symptoms. There was always an apparent tendency of blood to the head in her.

Dr. Forbes Winslow was the next witness. I have carefully attended to the evidence in this case, and yesterday, also, had a long interview with the prisoner. I have heard the evidence of Mr. Izod, and it is my opinion that the attack of paralysis suffered by the prisoner was the result of a diseased brain. Paralysis may exist in some cases without actual insanity, but it is always symptomatic of a disease in the brain. Bleeding at the nose is a symptom of congested brain, and it is considered as an effort of the brain to relieve itself. During my interview with the prisoner in the gaol I did not observe any symptom of insanity. Cases of temporary insanity resulting in a desire to commit murder or suicide are very common. I have known many instances where the patient has made an attack upon some near relative with whom he had previously been on the most affectionate terms, and it frequently occurs with mothers and children. In such cases the patient suddenly suffers under a strong homicidal impulse which he cannot control; and it has happened to me to hear a patient bitterly lament being under the influence of such an impulse. The impulse is generally stronger in proportion as the parties are more nearly and dearly connected, and to the previous affection existing between them.

By the Court.—A person, whose body was fatigued by watching or exertion would be more likely to have the brain suddenly affected in this way than another; and the fact of the prisoner having been for two nights engaged in attending to her sick children very possibly rendered her mind more likely to be affected. A combination of suicidal and homicidal mania was frequently found combined, both arising from a disordered state of the brain. Witness agreed with Mr. Izod, that the condition of the prisoner's brain rendered her peculiarly liable to suffer from excitement; and he had no doubt that her brain had been in a disordered state ever since the attack of paralysis. In cases of transient insanity it was very common for patients to say that they experienced the sensation of a dark cloud passing before their eyes; and while in that condition, it was his opinion that the mind was thrown off its balance, and the patient, during the paroxysm, was not able to distinguish between right and wrong. In such a case there would not necessarily be any particular delusions.

In answer to a question put by Mr. Bodkin, Dr. Winslow expressed an opinion from what he had heard, in the prisoner's case, that her brain was structurally disorganized, and he said this would render it much more disposed to be affected by any moral shock. He went on to say that the mere fact of an enormous crime being committed without any apparent motive would not alone induce him to come to the conclusion that the party committing it was insane; but he said that if he found any one had killed a near relation without any motive, and that it appeared they had, up to the time of the act being committed, been on kind and affectionate terms, he should certainly think that, *prima facie*, it was an indication of insanity, but he should not positively come to that conclusion without regarding all the other surrounding circumstances.

Upon being re-examined, Dr. Winslow said he was of opinion that at this moment the prisoner was suffering from disease of the brain.

Dr. Daniel and *Dr. Inglelew* were then examined, and they stated that they concurred in the opinions expressed by *Dr. Winslow*.

After a masterly speech in her defence from *Edwin James, Q.C.*, and an impartial summing up by the Judge, the jury acquitted the prisoner on the ground of insanity.

The preceding is a brief summary of the facts of this important criminal case. Abstracted altogether from the collateral circumstances surrounding the question of *Mrs. Brough's* alleged mental disorder, we would, *imprimis*, consider the *act itself* as symptomatic of a *questionable* if not of a *positively deranged state of mind*. We admit that evidence of this character should be cautiously received; but few conversant with the phenomena of criminal insanity, would acquiesce in the opinion that the malignity and atrocity of an act should altogether be disregarded, when estimating the state of mind accompanying its commission. Is it reasonable, for one moment, to suppose that this unhappy woman, who was admitted to have exhibited to her children, up to a short period antecedent to their death, the most kind and tender affection; nursing them with apparent motherly fondness during an attack of severe illness; sitting up with them for three consecutive nights, could, *in full possession of her senses*, have coolly murdered them, solely because she had been detected in an act of infidelity, and was in dread of being deserted by her husband! The idea is preposterous. *The act itself bears insanity stamped on its very face!*

We cannot, for a single instant, believe, that any mother, however lost to all sense of shame, and deeply steeped in vice, could, in violation of one of the most powerful instincts wisely implanted in the human heart, proceed deliberately, in defiance, and in total disregard of appeals that would have roused even the affection, and wrung the heart of a Hottentot or New Zealand savage, destroy six of her unoffending and innocent children! She says, in her voluntary confession:—

“I went to Georgy and cut her throat first. I did not look at her. I then came to Carry and cut her, then to Henry; he said, ‘Don’t mother.’ *I said I must, and did cut him.* Then I went to Bill, he was fast asleep. I turned him over. He never woke. I served him the same. I then nearly tumbled into this room. The two children here, Harriet and George, were awake. They made no resistance at all. Harriet struggled very much after I cut her, and gurgled for some time. I then lay down and did myself. I can’t tell you what occurred for some time after that till I seemed weak, and found myself on the floor. *That nasty great black cloud was gone then.* Then I was thirsty, and I got the water-bottle, and drank. I fell in a sitting position. I sat a little while and got up and saw the children, and it all came to me again. I wished to call, but could not speak. I did not know what to do. I went to the window, and put something out to attract attention. I staggered back to my own bed, and lay till I

heard the ringing of a bell. They made such a noise. I got up and went on my hands and knees to the window. I could not make him understand nohow in the world. It was Henry Woolgar. I went down to unbolt the door. There was only one bolt fastened. I undid that. They can tell you the rest."

Let the reader calmly consider the above confession, and quietly appeal to his own judgment as to the probable state of this unhappy woman's mind at the time she committed the murder. Could she, we again ask, have been otherwise than insane? "The nasty great black cloud" to which she refers was, we apprehend, one of the symptoms of that transient insanity or delirium with which we maintain she was afflicted during the enactment of the dreadful tragedy in which she played so fatal and conspicuous a part. The paroxysm of homicidal insanity was, we presume, the result of the severe mental shock to which the brain, actually disordered at the time, was exposed, when she discovered that her husband was cognisant of her guilty passion. This nervous concussion, in all probability, produced a vascular fulness, or congestion, of the vessels of the brain. She complained of head symptoms on the day prior to the murder; and, feeling the necessity of medical assistance, she sent for Mr. Izod, but, unfortunately, he did not see her.

Had she, at that time, been placed under appropriate medical treatment, how different, in all probability, would have been the result? After cutting her own throat and losing a large quantity of blood, the head was immediately relieved; the overloaded vessels disgorged their contents; the balance of the cerebral circulation was established; all undue pressure on the brain was removed; and then, according to Mrs. Brough's account, "that nasty great black cloud" passed away; in other words, the mind was restored to a state of sanity and healthy consciousness. Is there anything singular or remarkable in this explanation of Mrs. Brough's condition of brain? It has frequently occurred, that an unsuccessful attempt at suicide has been made, during temporary and suddenly-developed attacks of mental derangement, dependent upon congestion of the brain, and the mind has immediately recovered its healthy condition, as the *effect* of the loss of blood following the division of some of the great vessels of the neck. This happened in the case of Sir Samuel Romily, who committed suicide during a paroxysm of mental derangement, and who recovered his senses as soon as the hæmorrhage that ensued had restored the brain to a state of healthy activity. Since writing the preceding comments upon this case, we have had kindly brought under our notice, by W. P. Stiff, Esq., one of the surgeons of the Nottingham Infirmary, a remarkable illustration of this fact. The case is one so much in point, that we make no apology for placing it before our readers.

"J. C., a clever mechanic, fifty-four years of age, was sent by the justices of the town of Nottingham to the workhouse, being found to be incapable of taking care of himself, owing to aberration of mind. On the 21st July, the day after his admission, he was found to be insane. He wandered about in a despondent manner, and laboured under several delusions; was in dread of being treated by Lynch law; imagined he had committed a robbery, and was to be hanged, murdered, guillotined, and stoned to death for it. On the 22nd, at nine A.M., one whole day only having elapsed since his admission, and when proceedings were about to be taken to give notice to the relieving officer of his unsoundness of mind, he obtained possession of a razor, and attempted suicide by cutting his throat with his left hand in a fearful manner. The right sternomastoid muscle and various vessels were divided, and the larynx and pharynx opened in the thyro-hyoid space. He lost three pints of blood instantaneously. All food taken in at the mouth was expelled through the wound. Painful cough was excited by trickling of blood into the trachea. The treatment consisted of injecting the stomach, by means of the ordinary stomach-pump, with milk, a quart at a time, and bandaging the head downwards on the chest, sutures and plasters having been found to be useless. *From the moment that he recovered from the collapse caused by the excessive hæmorrhage, every symptom of disordered intellect disappeared; he became rational and well-conducted; his despondency ceased, and his delusions vanished.* He became anxious about his recovery, submitted with eagerness to the introduction of the stomach-pump, and gradually regained his appetite and strength. On the 2nd September he was convalescent, and without having taken a single dose of medicine."

After directing special attention to the preceding illustration, we resume our analysis of Mrs. Brough's case.

After the brain was relieved, and this miserable woman was restored to a full consciousness of her awful condition, and realized in all its terrible reality the dreadful fact, that she had, in a moment of frenzy and delirium, imbued her hands in the blood of six of her children, what, we ask, was her first impulse? Did she, in conformity with what usually happens in cases of crime perpetrated in a sane condition of mind, try to conceal the fact? Did she endeavour to inculcate another in her own foul deed? Did she make an effort to evade justice by flying from the spot? Did she deny all knowledge of the murder? No! Had she committed the crime in full possession of her senses, it is reasonable and fair to presume that she would have endeavoured to conceal the fact by some kind of artifice: but she did nothing of the kind. Contemporaneously with her restoration to consciousness, as the effect of the loss of blood, arose in her mind the necessity of her adopting means for giving immediate publicity to the murder. With this object she made an effort to shout, but could not succeed in making herself heard. She was unable to utter any vocal sounds, having, in the attempt upon her own life, partially divided the windpipe. Feeling a

pressing need for assistance, she seized a pillow saturated with blood, rushed with it to the front of the house, and placed it in a conspicuous position, outside of a window immediately facing the main road. So situated, it was seen by one of the witnesses, who, after giving the alarm, succeeded by means of a ladder in gaining access to the house. Need we dwell any further upon this particular feature of the case? Is the act just described consistent with the conduct of a person who had butchered her children in a condition of mind perfectly free from all suspicion of insanity? No impartial person can reply in the affirmative. We now proceed to our analysis of Mrs. Brough's alleged cerebral disease.

Mr. Izod and other witnesses speak distinctly of an hemiplegic attack that Mrs. Brough had experienced some years previously, attended with loss of consciousness, &c. Now, from the *sudden character* of that paralytic seizure or "fit," as the witnesses described it, we have no doubt whatever of its origin or nature. It was our opinion, and we expressed it during our examination *in chief*, that the paralysis was consequent upon some slight effusion of blood, most probably in the substance of the *corpora striata* or *thalami*, that if the extravasated fluid or "clot" had been fully absorbed, the paralytic symptoms would have subsided; but finding in this case that the loss of motion partially remained, and that there existed evidently a defect in the powers of articulation, we stated, as the most probable solution that occurred to us on the moment, that this deposition, effusion, or clot of blood had not been properly absorbed, and that the brain in its neighbourhood was, in all probability, softened, or had otherwise become *permanently disorganized*. It was evident that Mr. Izod had observed a suspicious state of brain ever since the first hemiplegic attack.

The above is the substance of our evidence, *quoad* Mrs. Brough's alleged cerebral disease. We arrived at the opinion that disease of the brain still existed, in the first place, from the *sudden* nature of her former paralytic seizure, and its association with well-marked *head* symptoms; secondly, from the partial state of paralysis *which then existed*, proving to us that some structural alterations must have occurred in the brain, as the result of her former cerebral attack. Having, as it was conceived, disease of the brain at the time, it was supposed that the mind was more liable to be thrown off its balance by any severe moral commotion or shock, than it would be if the brain was in a healthy state, and had exhibited no symptoms of prior disorder. It may be said that perfect sanity, soundness of mind, and self-control are compatible with a considerable amount of disease in those portions of the brain referred to as the probable seat of the paralytic stroke. Admitted. But in a case of this magnitude and importance, when the

life of a fellow-creature is mainly dependent upon satisfactory proof being afforded of the presence of a morbid condition of brain at the time the alleged criminal act was committed, surely no reasonable person would cavil as to the exact position of the organic lesion. If the brain, the recognised organ of the mind, had undergone serious alterations in its delicate structure, who would have the boldness, when giving evidence upon oath, to circumscribe the limits of the disorganizing process, and say that the more important portions of the cerebral mass, supposed to be *directly* associated with the operations of the mind, *were not implicated*. It was sufficient for the defence of Mrs. Brough, to establish that she *had* disease of the brain. When life is suspended upon a thread, it surely would be deplorable if men of science, in recording their testimony, took into the witness-box the refinements of the schools, tried to draw nice physiological and pathological distinctions, and split hairs upon subtle points explicable only to the initiated. The presumption was, and we maintain that it was a legitimate one, that if it could be established that Mrs. Brough's brain was *actually diseased*, irrespectively altogether of its *locality*, it would be impossible to say to what extent that disorganization had proceeded.

Having sufficiently considered this division of our subject, we now proceed to view the act of homicide itself, as an indication of insanity. It has occurred to us during our practice to have been consulted by patients complaining of being subject to homicidal and suicidal impulses. They have occasionally described their state of mind in language remarkable for its similarity to that used by Mrs. Brough. Two or three singular cases of this kind have come under our observation, in which, during the height or crisis of the suicidal or homicidal delirium, patients have said, that they appeared to be in a "dreamy, misty state of mind," and surrounded by a "dark cloud." During the existence of an attack of this nature, consciousness appears to be partially suspended. The patient loses all knowledge of his personal identity, and is driven by an irresistible force to the commission of the most horrible crimes. We have known persons subject to periodical seizures of this nature, who, during the intermission, have bewailed their sad state, and have earnestly implored medical relief. In some cases the morbid desire to sacrifice human life never is absent from the patient's mind. A striking illustration of this kind we had an opportunity of examining a few months back. It was the case of a poor woman under the care of Dr. Skae, at the Morningside Asylum, Edinburgh. In this instance, the miserable woman expressed an intense and unconquerable desire to gratify her thirst for human blood. In language indicating the acutest amount of mental anguish and suffering, she bitterly lamented to us the

existence of these horrible homicidal impulses. The case of Mrs. Brough presented many of the features usually found associated with attacks of homicidal insanity, as described by writers of experience, and found recorded in our recognised text-books. It is a singular, a generally admitted fact, that the suicidal and homicidal propensity frequently proceed *pari passu*. All authorities on medical jurisprudence of insanity notice this phenomenon. The same morbid state of the brain and disordered instinct that originates the suicidal impulse often develops the homicidal delirium. Mr. Sampson, in his interesting essay on Criminal Insanity, cites numerous cases of this kind.

It has been alleged that Mrs. Brough's description of her mental state at the time of the murder, and, in fact, the whole details of the sad event, were ingeniously and cunningly suggested by others, for an ulterior purpose. Such, it is evident, was not the fact. She gave the same minute account of her state of mind and the same narration of facts to the first person she saw, and with whom she had any conversation in reference to the event. Whether true or false, the history of the murder, and the particulars as to her peculiar sensations at the moment, *originated entirely with herself*. She on several occasions repeated the same facts, never once deviating in the slightest degree from the voluntary statement she gave to the Inspector Biddlecomb when he took her into custody.

In discussing the merits of this case, much stress has been laid upon the alleged immoral character of Mrs. Brough. It has been asserted that she was a depraved woman; that she was detected in an act of gross infidelity; and fearing the consequences of her vice, she, from a feeling of revenge, deliberately and premeditatively sacrificed the lives of her children, and then attempted her own! We do not deny that she was an adulteress; but if we are to form our judgment of her moral character from the evidence adduced at the trial, she is certainly not the horribly depraved woman represented by those who have severely animadverted upon her escape from the extreme penalty of the law. That her husband had good and valid reasons for suspecting her fidelity, we do not for a moment question. That, acting upon these well-founded misgivings, he employed a detective officer to watch his wife's movements, is an undisputed fact; that the man so engaged came up to London in the train with Mrs. Brough; that he was cognizant of her meeting a man at the station with whom she had evidently made an assignation, we also readily admit. *But here the sworn evidence stops*. She may, for aught we know, have proceeded onward in her career of guilt, but no evidence to justify such a conclusion was adduced in court during the trial.

The writers who have so freely commented upon this feature of the

case may have been in possession of *extra* judicial information, fully warranting all their observations. But the witness only proved that he saw Mrs. Brough meet her alleged paramour at the London terminus. We direct the particular attention of our readers to this fact, for the scientific evidence could only be based upon the sworn testimony brought forward at the trial, and not upon vague aspersions and rumours suspended in the atmosphere surrounding the court. We do not maintain, that if all that has been subsequently said of Mrs. Brough's immorality had been fully established at Guildford, it would, in the slightest degree, have modified our opinion; but in justice to ourselves, and other medical witnesses engaged in the case, we are bound to direct the attention of our readers to the fact that when an *expert* is put into the witness-box to elucidate points of science, he is bound by his oath to base his conclusions solely and exclusively upon what he himself has seen, or upon the evidence he has heard adduced in court. This is in unison with the humane and just principles of British criminal jurisprudence. But yielding to our adversaries all the advantages they derive from a knowledge of Mrs. Brough's depravity, is the question at issue at all affected by it? Admit that she was discovered in the commission of an inexcusable act of gross immorality, that she was a vicious woman, had violated her marriage vow, was guilty of undeniable infidelity, how can these facts affect the question as to her state of mind when she murdered her children? To us they appear quite extraneous to the real point in dispute. It would be obviously and absurdly illogical to argue that *because* she was a debauched woman, and if sane deserved to be severely punished, that *therefore* she was in full possession of her senses when she sacrificed the lives of her unoffending offspring! Our opponents argue, in the first place, that she was not insane at all, and ought to have been hanged; secondly, that if she were insane, her mental derangement was the result of the immoral life she had led for years, and as her insanity was *self-created*, the gallows ought to have claimed her for its victim. Others have maintained, that having been detected in the commission of crime, and fearing her husband would desert her, and in all probability remove the children from her guardianship, she in a spirit of revenge murdered her children, and subsequently cut her own throat! Now, we do not deny that her insanity was the consequence of the severe moral shock acting upon a predisposed brain, and to which she was subjected when the discovery of her guilt was made. Neither do we argue that the fear of the penalties incurred by her immoral conduct had no connexion with the murder of her children. Her *morale* may have been much worse than the writers in the daily press represent; it is quite possible that her mind did brood over the misery, desolation, and utter hopelessness that darkened her prospects for the future. We admit

that she felt acutely and keenly her degraded position ; fully realized the fearful punishment that awaited her ; was conscious that her husband would abandon her for ever, and cast her, poor wretch ! upon the frigid sympathies of the world with the mark of Cain upon her forehead ; that the children whom she brought into the world, and towards whom she had, as was proved by respectable witnesses, exhibited all the fond and enduring affection of a doting mother, would be taken from her. We willingly—fully admit—all these facts ; but do they, we ask, establish that Mrs. Brough was, at the moment she committed the crime, in a sane state of mind, and a responsible agent ? It is a lamentable fact, and the statistics recorded in the annual reports of our national Public Asylums conclusively demonstrate its truth, that much of the insanity amongst the pauper portion of our population may be clearly traced to *habits of intemperance*,—in other words, that it is *self-created*. The same cause is in operation, but to a limited extent, in the middle and upper classes of society ; but insanity may be often traced to a criminal indulgence in depraved habits and vicious thoughts, to reckless and unprincipled conduct ; to long indulged self-will ; to a censurable neglect of the cultivation of habits of *self-control* ; to an utter disregard of all mental discipline and training, and above all, to a repudiation of the principles of our holy and revered religion, and total rejection of the great scheme of man's redemption. We do not maintain that religion is, even in its most cheering and soothing aspect, invariably a safeguard and protection against so dire a calamity as the loss of reason ; but we do assert that, *cæteris paribus*, the man who most fully appreciates the comforting and elevating principles of our common Christianity, and lives up to his professions, is to a great extent shielded from the influence of those causes, which so frequently derange the human mind. If we are justified in considering every person accountable and amenable to punishment whose insanity can be clearly traced to *self-created causes*, where are we to draw the line ? The man who, as the result of a series of debaucheries, *voluntarily* drinks himself into a state of furious delirium, is, as long as that delirium continues, *non compos mentis*, and is not accountable, in the eye of the law, for any act committed during his paroxysm of frenzy. We may regret that there should not exist for cases like these a secondary form of punishment, which, if judiciously awarded, might prevent much of the deplorable misery we are daily compelled to witness in social life ; but until our criminal code has undergone material alterations, it is not for us to draw refined distinctions, and say one class of insane persons should not escape the legal penalties to which they have by their conduct exposed themselves, simply because their mental disease can be traced to unbridled passion or unchecked vicious impulses and thoughts ; and a different class of the insane, whose

sad condition has originated from causes quite out of their own control should entirely escape from punishment or censure. With these general remarks, we dismiss altogether the argument of Mrs. Brough's legal accountability, based upon the presumption that her insanity was self-created, and the result of an habitual indulgence of a criminal passion.

There are a few other points of interest connected with this remarkable case, to which we, in conclusion, can only cursorily refer. We allude to the fact of Mrs. Brough's having been liable to attacks of *epistaxis*, or hæmorrhage from the nose. These discharges had been for a short time suppressed. We direct attention to this fact, not because we attach grave importance to it, but when viewed in association with other portions of Mrs. Brough's history, it is entitled to some consideration. It is quite possible that a suppression of this discharge might have created an unnatural vascular fulness, or congestion of the brain, and, with other causes, have co-operated in deranging the mind. Again, we cannot omit all allusions to Mr. Izod's important statement, that on the day preceeding the murder he had noticed something peculiar about Mrs. Brough's cerebral condition, and had considered it his duty to guard her against exposing herself to causes of mental excitement. We think sufficient has been advanced to establish to the satisfaction of our readers, that if we have not succeeded in proving Mrs. Brough's positive insanity, the facts referred to demonstrate beyond all disputation that a strong *primâ facie* case was made in support of the plea urged in her defence, and that the decision of the jury was founded upon a humane, just, and enlightened consideration of the facts of this singularly painful case.

ON THE CAUSES AND MORBID ANATOMY OF MENTAL DISEASES.

BY JOHN WEBSTER, M.D., F.R.S.

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MUCH attention being now paid to the study of mental alienation, and its varied phases met with in the human constitution, I am induced to bring under the notice of my professional brethren some facts illustrative of the causes producing insanity, as also the pathological appearances observed after death, which, it is hoped, may be deemed worthy of perusal by the readers of the *PSYCHOLOGICAL JOURNAL*. As the data recorded—embracing amongst other points a synopsis of 115 dissections of insane patients—were all derived from the registers of Bethlem Hospital, they consequently possess greater value; whilst the deductions enunciated being based upon an extensive series of figures, collected during the last six years at that public receptacle for lunatics, they seem quite sufficient to warrant the opinions I have ventured to promulgate.

Without further preamble I would therefore observe, in reference to the subjects proposed for investigation that, since the 1st of January, 1848, to the 31st of last December, the total insane curable patients admitted into Bethlem hospital amounted to 1720 individuals; of whom 1958 were females, and only 662 male lunatics; thereby showing mental diseases prevailed to a much larger extent amongst the former than the latter sex; the difference being nearly 60 per cent. more female than male patients placed under treatment at the above institution. This conclusion entirely coincides with similar statements I have elsewhere made, respecting the marked frequency of lunacy in females, and proves, according to more recent experience, that mental diseases much oftener attack women than men, throughout the metropolitan population.

Respecting the season when insanity most frequently prevails, it may be asserted confidently, the warmer the weather, so will morbid affections of the mind supervene in greater numbers, than during the colder months. This peculiarity is conclusively established by the larger amount of insane persons admitted throughout spring and summer, than in the autumn and winter months. For example, during the six half years, ending the 30th September, of the entire period included in the present communication, 920 insane patients were received into Bethlem Hospital; whereas, only 800 entered during the more inclement six months of the above years; thus giving an increase of 15 per cent. in the former over the latter period. This result is certainly at variance with the generally entertained opinion, that madness prevails most commonly in London during the cold weather of winter; when suicides are also said to be frequent, especially in the murky month of November. Such an assumption is, however, erroneous; seeing insanity is not only met with to a greater extent during hot weather, but more cases of self-murder are usually recorded, both in England and France, throughout June and July, than during the colder season.

Believing the time of life at which mental diseases most frequently affect the human frame is a point of considerable interest to physicians, I would state, as one feature characterizing these maladies, that more individuals became attacked by mania, speaking generally, from their thirtieth to the fortieth year than at any other period—474 cases, out of the total 1720 lunatics admitted, being reported to have attained that age; hence, giving upwards of one quarter of the entire number, or 27·55 per hundred admissions, affected at the above time of life. With reference to sex, it also deserves mention that the insanity oftenest supervened in females about their 30th year; whilst males became insane in a greater ratio from their thirty-fifth to fortieth year, than at any other period.

The domestic condition of the lunatics attacked next deserves notice; of whom upwards of half the entire number admitted, or 873 patients were mar-

ried; the largest proportion being however males, 351 individuals of that sex, or 53 per cent., being so described; whereas, the number of married women was 522, or only 49·24 per hundred admissions. Of single persons, the amount was 736, or 42·79 per cent.; but, were the two sexes compared, the greatest ratio occurred in bachelors, who seem, like married men, oftener affected by insanity than single females, although the difference only ranged about one per cent. The result was, however, different betwixt widows and widowers, 25 individuals of the latter description being enumerated amongst the 662 male lunatics admitted, which thus gave less than 4 per cent.; whereas, the number of widows amongst the total 1058 female lunatics placed under treatment having been 86, the ratio, consequently, reached to upwards of 8 cases per hundred admissions; hence showing that insane widows exceeded as two to one the male patients of a similar category. This fact is curious, and would almost warrant the conclusion of mental maladies being less likely to supervene in men, than women during widowhood and its attendant bereavements.

Suicidal propensities, and violent or dangerous symptoms, whereby lunatics frequently commit injury upon others or themselves, being often common characteristics of their mental malady, the ratio in which the above types were observed, in the cases attacked, therefore becomes an interesting subject of inquiry. Amongst the 1720 lunatics recently admitted, upwards of one-third, or 624 individuals, were reported to have either meditated, or attempted to commit suicide. This number constitutes a large proportion, and indicates how frequently the propensity to self-destruction accompanies mania. Amongst the female lunatics, the suicidal patients reached nearly 29 per cent.; whilst, of the male inmates, exhibiting a similar feature, 32 cases were reported in every hundred admissions. Respecting the number of inmates considered violent and dangerous, the ratio rose much higher than in the former division; since upwards of 52 per cent. of all the cases admitted, or 909 individuals, were thus classified. Like the suicidal propensities also often manifested by lunatics, more males were found violent and dangerous patients than females; seeing 55½ of the former against 35½ of the latter sex were so enumerated; which makes the comparative ratio amount to 83·78 per cent. amongst the male, but only to 33·55 per cent. of the female inmates.

The apparent causes reported to have produced mental alienation in the 1720 insane patients referred to in the present paper, form the next subject of inquiry. Of these, the largest proportion of cases arose from moral influences; nearly one-half, or 48 per cent., being of that description. Physical causes were, on the other hand, assigned in 402 instances, or 24 per cent. of the aggregate admissions, although hereditary tendency to insanity was, at the same time, reported to exist in many patients comprised within both divisions; besides others, in whom no obvious cause, excepting their hereditary predisposition, could be clearly traced; whilst no satisfactory information could be obtained in about one-tenth of the total cases admitted. Respecting the actual number of lunatic patients in whom mental disease was hereditary, 552 persons, or 32 per cent., exhibited that predisposition. Amongst insane males, however, this distinctive feature appeared less marked than in females—a larger proportion of the latter than of the other sex coming within that category. This fact becomes in a greater degree interesting, seeing mothers, compared with fathers, more frequently transmit mental maladies to offspring; particularly by the former parent to their female children.

Upon making a more minute inquiry respecting the moral causes producing mental disease with reference to sex, it appears that, in male patients, anxiety became the most frequent cause; 93 instances, or 14 per cent. of the entire admissions, being so reported. Pecuniary losses followed next in frequency; 50 examples, or 7·55 per cent. being thus enumerated. Excessive study produced madness in 41 male lunatics, or 6·34 per every hundred admissions.

Through religious excitement, 29 men lost their senses; and 16 from grief. By love, 14; and through fright, only 4 male persons became insane; although this cause, like the tender passion of love, oftener produced mental aberration in women than men, as the following facts demonstrate. Thus, through fright, 22 females lost their senses, and 43 from disappointed affections; which makes double the ratio noticed in male patients, and still farther corroborates my opinion elsewhere expressed, that insanity is oftener occasioned by Cupid's powerful influence when acting upon the more susceptible imaginations of women than men, speaking comparatively. In reference to other moral causes which frequently excited mental disease in females, anxiety occupied the first rank, as it did in male patients; 123 instances, or 11·62 per cent. being of that description. Grief produced madness in 76 cases, or 7 per cent. Through religious excitement, 53 women became mad. From pecuniary losses, 36 females, or only half the comparative ratio noticed amongst male lunatics; whilst, in consequence of excessive study which occasioned insanity, as previously stated, in 41 male inmates, only 2 females were reported, who thereby lost their senses. Regarding the physical causes which induced mental derangement, it may be briefly stated, that intemperance proved the most frequent amongst men—61 male persons, or 9·21 per cent. of the entire admissions having become insane through intoxication; whereas amongst females the proportion only reached half that amount, or 45 examples out of 1058 admissions. The most common physical influence which occasioned insanity amongst women, was unquestionably puerperal, of which description, 70 examples were enumerated. Uterine disturbance, as also prolonged lactation, and change of life, were besides often recorded as the apparent physical cause inducing mania in females; but these were by no means so frequent as either puerperal influences or intemperance.

Various other causes might be specified, both moral and physical, besides those mentioned, which frequently produced attacks of mental derangement in each sex; but this seems superfluous. However, misconduct of relatives, jealousy, desertion of husband or of wife, family strife, quarrels, and unjust accusations, were all assigned in both sexes as the exciting moral causes of mania; whilst exposure to the sun, blows on the head, and previous bodily illness were by no means rare. In short, many impressions which acted powerfully upon individual and susceptible minds, especially if the physical health was previously deranged, were occasionally reported, but which need not be farther particularised, seeing the chief and most frequent causes to which attacks of mania were mainly ascribed have been prominently mentioned in previous paragraphs.

When perusing the report of autopsies I now subjoin, it should be understood, if no mention is made of the chest or abdomen in any of the cases, neither of these cavities exhibited any diseased alterations of structure.

SYNOPSIS OF DISSECTIONS.

No. 1.—M. æt. 23. In hospital nine months.—*Head*: Infiltration of pia mater, and increased quantity of fluid in ventricles.—*Chest*: Left lung consolidated, and completely impervious to air, throughout. General tubercular infiltration, with purulent excavations of various sizes, containing thick yellow pus. Lung covered by an uniform adventitious coating of recently organized fibrine, uniting with lobes. Cavity of pleura contained about two pints of fluid. Tubercles, and consolidated portions of pulmonary tissue, scattered irregularly through the right lung.—*Abdomen*: Mucous membrane of ilium and colon of a dull livid red colour, from vascular congestion.

No. 2.—F. æt. 39. In hospital four days.—*Head*: External vessels perfectly empty; those of membranes, and brain, turgid, more especially in substance of cerebrum: where bloody points were universally numerous and

large. Medullary substance generally presented a very faint pink appearance, so as to seem mottled. Slight serous infiltration of pia mater, and a doubtful increase of fluid in ventricles.

No. 3.—M. *æt.* 38. In hospital four days.—*Head*: Considerable opacity and infiltration of pia mater; also large and numerous bloody points on cut surfaces of cerebral substance.—*Abdomen*: Urinary bladder empty. On its posterior surface, beginning a little below its fundus, and extending from above downwards, an apparently lacerated opening with irregular margin, about two inches in length. In abdominal cavity, a few ounces of dark fluid, discoloured by blood were found, with some very small portions of bloody coagula. Peritoneum and viscera discoloured, but not inflamed.

No. 4.—M. *æt.* 37. In hospital twenty-five days.—*Head*: Fulness of all internal vessels, and great vascularity of cerebral substance throughout. Arachnoid thickened and opaque, over convexities of hemispheres. Much infiltration of pia mater: infiltrated fluid being reddish and turbid. A thin layer of cortical substance came away with membrane, in a few situations. Cerebral substance everywhere softer than usual, and yielded to slight pressure.—*Chest*: The 4th, 5th, 8th, and 10th ribs on right side were broken; and the four nearly corresponding ribs on left side also fractured. With one exception, the fractures were in the cartilages, near their junction to bone; but without displacement. From appearances, fractures must have taken place prior to patient's admission, as there was suppuration around fractured parts: especially between ribs and pleura. Violent inflammation of pleura costalis on both sides: but extending in less degree to pleura pulmonalis. Thickening of membrane, and effusions of soft yellow fibrine. Left pleura contained, at least, two quarts of opaque bloody fluid with flakes of fibrine; and about half that quantity of similar looking fluid on right side.

No. 5.—F. *æt.* 49. In hospital seventeen days.—*Head*: Adhesions of dura mater to bone so strong that detachment of skull cap required unusual force. Its vessels, and those of bone, very turgid. Serous infiltration of pia mater, with increased quantity of fluid in lateral ventricles.—*Chest*: Inferior lobe of left lung in an incipient state of hæpatisation throughout: with slight fibrinous deposit in its serous covering; and thin edge of superior lobe in the same condition at one part; also similar appearances in small portions of right lung. In centre of one, which seemed about the size of a walnut, the deposit of fibrine was as large as pea.—*Abdomen*: Considerable disease of left ovary, consisting principally of various sized cysts; the two largest containing nearly a pint of fluid each: the others appearing much smaller. In centre of cysts a firm mass of fibrous and vascular structure. Internal surface of ilium, congested, with ulceration.

No. 6.—F. *æt.* 37. In hospital seven weeks.—*Head*: Upon dividing dura mater, cerebral hemispheres bulged over cut margin of skull, as if liberated from pressure. Arachnoid transparent, and considerable effusion of serous fluid in pia mater. Cut surfaces of cerebrum exhibited numerous bloody points; and ventricles contained about an ounce of fluid; with considerable quantity also of serous fluid at base of skull after removal of brain.—*Abdomen*: Great congestion of mucous membrane of ilium and cæcum; with superficial sloughing and ulceration. Peyer's patches enlarged by morbid deposit, and converted into ulcers, varying in size from a fourpenny piece to a shilling.

No. 7.—M. *æt.* 35. In hospital six years and fifteen weeks.—*Head*: Upon removing skull-cap, contents of cranium bulged over osseous margin, as if liberated from pressure. Vessels on surface of brain full of blood. Arachnoid dotted with opaque white spots. Pia mater infiltrated with clear serous fluid; and convolutions—apparently compressed—were separated one from another, so as to allow end of finger to be inserted between. Brain firm, its cut surfaces presented numerous red points; and ventricles contained about half an ounce

of clear serum.—*Chest*: Opposed surfaces of right pleura universally adherent. Both lungs swelled, and partially emphysematous, were occupied, in their whole extent, by various sized tuberculous deposits; some recent, others of older date, and all opaque or softened. About root of lungs, several conerctions—the size of peas—were noticed, and numerous cavities existed in that organ, communicating with large bronchi. In coats of aorta, just above semilunar valves, a mass of yellowish coloured deposit was observed.—*Abdomen*: Accumulations of tubercles in mesenteric glands of larger size than natural.

No. 8.—M. æt. 33. In hospital three years and five months.—*Head*: Dura mater very firmly adherent to bone. Internal vessels turgid. Brain closely filling cranium, so as to bulge a little over its cut edge. Arachnoid nearly free from moisture.—*Chest*: Considerable portion of right lung, towards back part, converted into a dense, tough substance, of nearly black colour, and totally impervious to air. Similar changes, to a less extent, in posterior part of left lung.—*Abdomen*: Mucous membrane of ilium dark coloured, from intense serous congestion: with partial ecchymosis of submucous tissue. Slight opacity of external covering of liver, of old date, but without adhesion.

No. 9.—F. æt. 29. In hospital eight months and three weeks.—*Head*: All vessels of brain and membranes extremely turgid; those of pia mater everywhere appearing as if minutely injected with blood. Cerebrum and cerebellum presented a deeper pink tint than normal state; cortical substance darker, so as to offer a stronger contrast than usual to medullary matter. Blood flowed over surface, wherever substance of brain was cut into. Arachnoid partially opaque over hemispheres, as also at base of brain. Cellular tissue of pia mater generally infiltrated. About an ounce of perfectly limpid fluid in each lateral ventricle; and much fluid likewise remained in base of cranium, after brain had been removed.—*Chest*: Right lung connected to pleura by slight adhesions of old date. Left lung highly congested, and breaking down easily on pressure: but still eripitant. The surface of upper lobe, at back part, had a dark, almost black appearance, but without any change in state of pleura, and a portion of pulmonary substance, equal in size to a small orange, was quite black, which exhaled, when cut into, gangrenous fœtor.

No. 10.—M. æt. 34. In hospital six months and three weeks.—*Head*: Arachnoid slightly opaque. Some effusion into pia mater: convolutions flattened. Brain white and soft. Ventricles distended by about five ounces of clear serous fluid, but septum lucidum entire. A considerable quantity of fluid also at base of skull after removal of brain.—*Chest*: Opposed surfaces of right pleura universally adherent, and the auriculo-ventricular valves appeared slightly opaque.

No. 11.—F. æt. 36. In hospital ten months and nine days.—*Head*: Skull cap heavy; frontal bone thickened, and cancellous structure obliterated. Its inner surface rough and projected into cranial cavity, pressing against dura mater, which was thinned almost transparent, and caused flattening of front portion of hemispheres. When skull-cap was removed, brain bulged over sawn edge of bone, as if liberated from pressure. Cerebral substance, white and soft. Lateral ventricles distended enormously, and contained full four ounces of clear watery serum; much fluid being also effused at base of skull, after removal of brain.—*Chest*: Opposed surfaces of both pleuræ adherent. Lungs consolidated at posterior part, and their cut surfaces presented numerous cavities, some containing pus and others softened tubercle; the right lung being especially diseased. Intervening pulmonary substance, between depositions of tubercle, compressed and in great part impervious to air.—*Abdomen*: Gall-bladder full of bile. Lower part of small intestines, and commencement of colon, with its cœcal appendage, occupied by numerous ulcers, some of which had nearly penetrated the tube; mucous membrane dark-coloured and congested. Ovaries large in size, and full of clear vesicles, or yellowish white cavities, from whence ova had escaped.

N. 12.—F. æt. 26. In hospital one month.—*Head*: Dura mater very firmly adherent to inner surface of cranium. Substance of brain dotted with numerous red points, and of firm consistence.—*Chest*: A few old adhesions, at posterior and upper part of cavity.—*Abdomen*: Kidneys large, with cortical substance of pale yellow colour. Ovaries small, having few traces of escaped ova. Uterus small, and in its virgin state. P.S. On the right side of this patient's neck, who died of erysipelas, the cuticle was separated, and patches of skin exhibited a darker hue than natural.

No. 13.—F. æt. 70. In hospital two days.—*Head*: Vessels within cranium tinged, as in cases where death was caused by strangulation. Some serous infiltration of pia mater, and fluid in ventricles slightly increased in quantity.—*Chest*: Right cavities of heart and large venous trunks loaded with blood. Walls of left ventricle thick, and muscular substance compact.—*Abdomen*: Convex surface of liver connected to abdominal parietes, by a few adhesions of old date; also similar adhesions of ascending colon.

No. 14.—M. æt. 42. In hospital three months.—*Head*: External vessels, and those of dura mater, rather empty. Convolutions of hemispheres somewhat flattened. Fluid in lateral ventricle slightly beyond normal quantity. Bloody points everywhere numerous in cerebral substance, when cut: and medullary matter had throughout a faint pink tinge. Brain firm.—*Chest*: Right pleura contained about a pint of serous fluid. Right lung rendered unnaturally heavy by great oedematous infiltration; particularly in its posterior two-thirds. Substance broke down under pressure, and fluid poured out in abundance wherever cut by knife. Left wing exhibited same state, but slighter in degree. Some fluid in cavity of pericardium, with serous infiltration in lieu of fat, under reflected portion of membrane.—*Abdomen*: A few ounces of fluid in peritoneal cavity; with some old adhesions of cecum and colon. Intestines bloodless and pale.

No. 15.—M., æt. 28. In hospital six weeks.—*Head*: Vessels in cranium turgid, and general evidences of increased activity of cerebral circulation. Internal surface of skull-cap uneven, though bone did not present any morbid appearances. Vessels of bone full, so as to give it a liver-like aspect when held against light.—*Chest*: Pericardium distended far beyond its usual size, in contact with sternum, for a breadth of nearly three inches, in lower half of chest; and it ascended to within an inch of upper margin. Cavity contained some ounces of an opaque, yellowish, sero-purulent fluid. Surface, both of pericardian sac, and portion of membrane, reflected over heart, covered universally by an irregular layer of soft yellow fibrine. An ordinary sewing needle, about two inches in length, had penetrated the left ventricle obliquely. Eye of needle lay a little below the surface, but could not be seen until an incision had been made; point of needle projected into cavity. Ventricle hard and incompressible; muscular substance, which resisted the knife from its firmness, appeared very compact, and rather paler, than in normal state. Distension of pericardium had so depressed diaphragm, that it pushed left lobe of liver and stomach into umbilical region. Both pleurae inflamed, with slight partial effusions of fibrine, this inflammation being most considerable on left side; and recent agglutination of lung to pericardium.

No. 16.—M. æt. 65. In hospital fifteen days.—*Head*: Strong adhesion of dura mater to bone, so that membrane was extensively torn in separating skull-cap. Infiltration of pia mater. About an ounce of fluid in each lateral ventricle; and numerous large bloody points on cut cerebral substance.—*Chest*: Some ounces of turbid fluid in right pleura. Considerable effusion of soft yellow fibrine in inferior lobe of right lung at posterior part. Lobe dark coloured, and partially consolidated; with a portion in centre, large as a walnut, mortified.

No. 17.—M. æt. 30. In hospital seven years, ten months, and a half.—*Head*: Skull-cap very firmly adherent to dura mater. Arachnoid opaque. Effusion of reddish yellow fluid in pia mater. Ventricles contained about an

ounce of clear serum. Substance of brain firm, but presenting numerous red points upon its cut surface. Considerable quantity of fluid about base of skull after removal of brain.—*Chest*: Some clear fluid in pericardium. Both lungs adherent to parietes of thorax, through old effusions of lymph between opposed surfaces of pleura. Substance studded throughout whole extent with semi-transparent grey tubercles, in masses of various sizes, some of which, at apices of lungs, had softened and formed vomicae.—*Abdomen*: Mesenteric glands enlarged by deposit of tubercle. Some old adhesions between transverse colon, and under surface of liver. Both upper and lower extremities anasarcaous. In left iliac vein, from root of inferior cava to popliteal space, a firm adherent coagulum existed, a portion of which had a yellowish red colour, from being partly deprived of its red corpuscles. Left common iliac artery contracted, and of a deep brown tint, for about an inch of its course. Upon being laid open, inner and middle coats were found divided, as if by the application of a ligature, while above this point, as also below, the arterial coats were jagged and torn, whilst the surrounding cellular sheath seemed stained with blood.

No. 18.—M. æt. 41. In hospital eleven months and ten days.—*Head*: An incised wound upon forehead, of a yellowish green colour, and offensive odour. After removing skull-cap, dura mater was found to cover a brain which had passed wholly into state of decomposition, semi-fluid, of green colour, and emitted a most offensive smell. Cut portion of every bone perfectly black, the osseous substance being stained by decomposed blood.—*Chest*: Both lungs emphysematous. Muscular substance of heart soft and discoloured. Pericardium contained about an ounce of turbid red serum.—*Abdomen*: Viscera contained much blood, were soft, and of dark colour. Liver almost black; spleen large and soft. Kidneys weighed $22\frac{1}{2}$ ounces, and dark coloured, like liver, throughout their whole substance. General anasarca, especially affecting lower extremities.

No. 19.—F., æt. 34. In hospital nine months.—*Head*: Vessels of cranium full of blood. Arachnoid opaque, of dull whitish colour, and dotted over with white points. Considerable effusion of turbid red fluid in pia mater. Cerebral vessels distended with blood, and cut surfaces of brain presented very numerous red points. Ventricles contained a small quantity of clear fluid, and a large quantity of turbid serum about base of skull, after removal of brain.—*Chest*: Pericardium contained a greater quantity of clear yellow serum than natural. A white spot upon front of right ventricle, easily stripped off, left rough surface behind. Right side of heart full of coagulated black blood, but left cavities empty. On both parietes of thorax, old adhesions of pleura, with some recent effusions of lymph on right. Both lungs extensively diseased by tuberculous matter, apices on each side hollowed out by large cavities containing pus and softened tubercle. Rest of lung consolidated by deposit of highly-organized semi-transparent grey tubercle. A portion of right lung converted into dense reddish-brown, fleshy-looking mass, which submerged, but did not completely sink in water.—*Abdomen*: Gall-bladder empty. Mesenteric glands much enlarged, and full of tubercle. Along course of alimentary canal, but especially in neighbourhood of cæcum, numerous deposits of tubercle between peritoneum and muscular coat of intestine, mucous coat being occupied by numerous ulcers, some equal in size to a shilling. Kidneys large and deep-coloured. A considerable-sized corpus luteum in right ovary.

No. 20.—M., æt. 47. In hospital eight weeks.—*Head*: Much reddish fluid in arachnoid cavity, together with a few thin coagula of blood, partly on surface of brain, and partly adhering loosely to surface of dura mater. Largest of these deposits, in middle fossa of basis cranii, on right side, where thin and loose coagulum covered a surface measuring about an inch and a half each way. Others did not exceed the size of a sixpence or shilling. Great infiltration of pia mater over whole extent of hemispheres. Bloodvessels of brain greatly con-

gested, bloody points on cut surfaces being everywhere large and numerous. Between two and three ounces of fluid in lateral ventricles, and much also remained in basis cranii, after brain was removed. Cerebral substances soft, without any change of structure, but presented, partially, a very faint pink tinge.—*Chest*: Numerous and large white patches on heart, especially right ventricle, with several on right auricle. Auriculo-ventricular valves partially thickened and opaque.

No. 21.—F., æt. 34. In hospital twenty-five years and four months.—*Head*: Great and general infiltration with clear fluid of pia mater covering hemispheres. Several convolutions considerably shrunk, leaving intervals occupied by infiltrated pia mater.—*Chest*: Both lungs contained small tubercles, numerous in upper lobe, particularly of left, and irregularly scattered in smaller number through other lobes. Partial thickening and opacity of pleura covering upper lobe of left lung. One of eight true ribs diseased; it adhered firmly to lung for an extent about equal to a shilling. On separating lung, a small cavity was exposed, containing thick yellow pus, with a piece of dead bone completely detached. Rib penetrated by similar disease, though no external swelling or suppuration had existed.—*Abdomen*: Covering of liver slightly thickened and opaque, over nearly whole of convex surface, with similar change to less extent on concavity of organ. Uterus moderately enlarged, unusually vascular, and small firm deposits irregularly scattered over surface. Broad ligaments thickened and hardened, their component parts being confused by adhesions to each other, and surrounding organs. A convolution of ileum adhered to fundus uteri, and on tearing it away, some drops of thick pus remained in uterus. Thick reddish pus escaped, without offensive odour, from the os tincæ. Entire fundus lined with stratum of yellowish, apparently inorganic matter, from two to four or five lines in thickness, which could be easily scraped off with knife. In colour, consistence, and absence of vascularity, it resembled tubercular deposits found occasionally in testes. Cervix uteri ulcerated throughout, surface being red and irregular.

No. 22.—M., æt. 36. In hospital five years and seven months.—*Head*: Skull-cap thin. Partial opacity of arachnoid. Slight serous effusion into pia mater. Cerebral substance firm, but upon cut surface, orifices of numerous vessels, larger in size than natural, were noticed. About an ounce of limpid fluid in lateral ventricles.—*Chest*: Heart contained considerable quantity of fluid blood, with two or three soft and loose coagula; the latter of scarlet colour, and collapsed.—*Abdomen*: Capsule of spleen thickened in one spot, the size of half-a-crown, and organ puckered up in that situation. Inner surface of duodenum stained with decomposed blood, in three or four spots. About three inches above cæcum, mucous membrane studded with numerous yellowish-white deposits, the size of pin's heads, and having the consistence of tubercle. Membrane, in its course towards rectum, became of deep red colour, and superficially ulcerated. In some parts deep reddish brown, whilst surface seemed covered by shreds of decomposed tissue. Whole of large intestines exhibited similar appearances, and walls of tube thickened.

No. 23.—M., æt. 45. In hospital thirty-two days.—*Head*: Infiltration of pia mater on hemispheres. Slight increase of fluid in lateral ventricles, and much remained in base of skull, after brain was removed. Bloody points on cut cerebral substance everywhere numerous, and orifices of divided vessels unusually large.—*Chest*: Lungs almost universally connected to parietes of thorax by old strong adhesions, strongest being on posterior aspect of each lung. Left organ could not be drawn out without extensive laceration of substance. Circumscribed abscess on this side, between surface of lung and chest. Upper lobe of right side entirely diseased throughout, partly in congestive state of pneumonia, and partly hepatized. In solid portion, three or four

abscesses; largest—size of hen's egg—contained dark stinking matter. Sides of cavity irregular, shreddy, and partially broken down. Others contained reddish pus.—*Abdomen*: In left kidney, an excavation about size of a nut, approached near surface of gland, where its situation was marked by puckered depression. Internal surface presented reticular appearance, and it contained some thin dark fluid of offensive odour.

No. 24.—M., *æt.* 25. In hospital fifteen days.—*Head*: Skull-cap heavy. Vessels of brain full of blood. Arachnoid transparent. Lateral ventricles contained an ounce of fluid.—*Chest*: Inner surface of both pleura lined by continuous thick layer of soft yellow fibrin, slightly adherent to parts upon which it rested. Very little fluid in pleural cavities. Both lungs floated in water, but substance in part softer than natural, and infiltrated by fluid. Numerous elevations, varying in size from a pin's head to split-pea, studded over surface. When cut, exposed cavities circumscribed by an irregular yellow line, which contained putrid, offensive fluid. Although several seemed about bursting into pleura, neither orifice nor escape of contents was discovered.

No. 25.—M., *æt.* 41. In hospital twenty-six days.—*Head*: Arachnoid thickened, opaque, and of milky whiteness, over superior and lateral aspects of both hemispheres. Considerable infiltration of pia mater. Membranes, when stripped from surface of brain, formed a thick, firm mass, instead of thin, delicate, normal covering. Slightly increased quantity of fluid in lateral ventricles, and much fluid in base of skull after removal of brain. Slight softening of corpus collosum and fornix at back of these parts.—*Chest*: Lower portion of inferior lobe of right lung mortified to considerable extent, surrounding margin being adherent to diaphragm. Space circumscribed by adhesion contained an offensive, dark, purulent fluid. Corresponding surface of diaphragm dark, but not disorganized, and adjacent portion of liver similarly discoloured. Posterior part of right lung generally, and that of left highly congested, being so far softened as easily to break down on pressure.

No. 26.—M., *æt.* 56. In hospital thirty years and two weeks.—*Head*: Partial opacity of arachnoid. Pia mater considerably infiltrated. Convolutions of hemispheres shrunk, so as to leave, in several situations, intervals filled by infiltrated pia mater. About two ounces of serum in lateral ventricles. Much fluid remained in base of skull, after removal of brain. Right corpus striatum shrunk, and had lost much of its convexity; towards anterior part, slight depression of light yellowish-brown colour. Cortical substance underneath exhibited same colour, and slightly broken down. Adjacent to posterior part, cavity existed nearly an inch long, but not quite so broad, and with smooth sides, of colour above described. It contained only a little fluid. These appearances were obviously the remains of cerebral hæmorrhages, and thus explained the attacks of paralysis formerly experienced by this patient.—*Chest*: Old adhesions of lungs, and slight œdema at back of right lung.

No. 27.—M., *æt.* 29. In hospital five months and three weeks.—*Head*: Extensive lacerated wound of scalp, and right parietal bone denuded to considerable extent; also numerous ecchymoses over whole head. Exposed bone, and subjacent dura mater more vascular than usual. Arachnoid transparent, but pia mater infiltrated by serum. Ventricles contained about an ounce and a half of limpid fluid. Cerebral substance softer than natural, and bloodless.—*Chest*: Sac of right pleura filled by a large quantity of sero-purulent fluid, in which flakes of recent lymph floated. Lung compressed, but connected by old adhesions at upper part to thoracic parietes. Pulmonary substance dark-coloured at posterior portion. Numerous old adhesions of left pleura. A white spot upon part of right ventricle of heart.

No. 28.—F., *æt.* 42. In hospital five weeks. *Head*: Arachnoid covering hemispheres partially opaque, particularly in intervals of convolutions, where it exhibited milky whiteness. Cellular texture of pia mater infiltrated, and fluid

of lateral ventricles somewhat increased in quantity. Slight pinkish discolouration of cerebral substance in some parts of structure.

No. 29.—F., æt. 62. In hospital one month.—*Head*: Bones of cranium thicker and more dense than usual, so that skull-cap was very heavy. Internal surface generally uneven, though bony substance presented no morbid change; vessels of bone full of blood, giving internal table a livid colour. Pia mater greatly infiltrated over whole hemispheres, fluid being of reddish colour at several parts of right hemisphere. Lateral ventricles contained each an ounce of limpid fluid, and foramen Monro formed a direct round opening between the two cavities. Cerebral substance softish throughout.—*Abdomen*: Mucous membrane of small intestines congested, especially near termination of ileum. Cancerous ulcer of os tinea, about size of half-a-crown, but disease had not made much progress.

No. 30.—F., æt. 43. In hospital six weeks.—*Head*: Some opacity of arachnoid, particularly along line of longitudinal fissure. Brain generally bloodless, but of firm consistence. Lateral ventricles distended by about two ounces of limpid fluid, and a large quantity at base of skull after removal of brain. Choroid plexuses pale and bloodless.—*Chest*: Areolar tissue in front of pericardium infiltrated by soft, recently-effused yellow lymph. Right lung covered, at lower back part, by layer of recent lymph, and considerable quantity of yellow serous fluid in sac of pleura. Left pleura distended by several pints of turbid yellow serum, mixed with flakes of lymph. Left lung compressed to back part of chest, and impervious to air.—*Abdomen*: Stomach distended by flatus, so as to conceal greater part of abdominal viscera. Right ureter contained some thin purulent fluid, which escaped from pelvis of kidney.

No. 31.—M., æt. 31. In hospital five months and three weeks.—*Head*: Cavity of arachnoid contained small quantity of reddish fluid. Convexities of hemispheres, in anterior two-thirds, covered by very thin, delicate, semi-transparent film, of dilute scarlet colour. At first, supposed to be ecchymosis of pia mater; on closer examination, film could be raised by gentle scraping with knife, subjacent surface being healthy. Similar appearance, to less extent, on internal surface of dura mater, some parts being thick; consisting, obviously, of coagula of blood, having dark vinous colour, and about thickness of a sixpence. Coagula not so numerous on left as on right side; while those in dura mater were in separate, nearly circular, portions of various size, but longest, not exceeding a shilling, extended into middle fossa of basis cranii. All the vessels of brain and membranes gorged with blood; and several processes of pia mater, between convolutions, were in a state of extreme congestion, with ecchymosis in one instance. Cerebral substance firm.—*Chest*: An old adhesion of right lung at apex. Inferior lobe in congestive stages of pneumonia, with incipient hepatization in one part, and a little soft fibrine on pleura covering lobe. In left lung, on inferior lobe, one portion, not exceeding size of a walnut, congested and partially consolidated.

No. 32.—M., æt. 34. In hospital five months.—The body, in this case, was that of an emaciated man, who, having retired as usual to the sleeping apartment, was found lying on his face dead next morning. Blood had gravitated to anterior part of corpse, giving a dull red hue to face, neck, and thorax.—*Head*: skull-cap thin; cerebral substance firm and pale.—*Chest*: Posterior surfaces of both lungs adherent to parietes of thorax; pulmonary texture dark coloured and easily broken down, particularly in lower lobes.—*Heart*: soft and pale, showing fatty degeneration of muscular tissue; transverse striae in fibrils very faint, and in many situations entirely obliterated.

No. 33.—F., æt. 55. In hospital ten days.—*Head*: Dura mater adhered so firmly to skull-cap that it was torn into shreds upon raising bone. Considerable effusion of serous fluid in pia mater; vessels of arachnoid full of blood. Cerebral substance more vascular than natural, anterior lobes being narrow and flat.

Much fluid at base of skull, when brain was removed.—*Chest*: Both lungs connected to parietes of thorax by old adhesions. Heart full of blood; left ventricle contracted, and of red colour, when cut into by knife.—P.S. Right arm of this patient extremely swollen, cuticle loose upon hands and fingers, which were also discoloured, as if in a state of partial mortification.

No. 34.—M., æt. 57. In hospital eight weeks.—*Head*: Dura mater adhered to bone so strongly, that membrane became torn into shreds when skull-cap was separated. Vessels, both of bone and dura mater, full of blood. Arachnoid transparent, with slight infiltration, and serous fluid in sub-arachnoid spaces at base of brain. Pia mater thin and transparent; cerebral hemispheres, particularly left, compressed; convolutions flattened, and entire upper surface of brain bulged over sawn bone. Some ecchymoses upon upper surfaces of both hemispheres, under arachnoid. In posterior lobe of left, a cavity, about size of small apple, contained a soft black clot of recently effused blood. Brain softened, and dotted with reddish black spots. Fluids in lateral ventricle had a light red colour, but clear and more limpid in opposite. Some extravasations under arachnoid upon cerebellum.—*Chest*: On front part of right ventricle of heart, a white spot, with a second, size of shilling, upon corresponding surface of pericardium. Tricuspid valves opaque and thickened. Left ventricle much increased in weight, magnitude, and thickness of walls; muscular fibres being deep red coloured, with columnæ carneæ thick and prominent.—*Abdomen*: Inferior extremity of right kidney continued forward over front of vertebral column, pursuing course of third portion of duodenum, and crossed by ureter.

No. 35.—F., æt. 38. In hospital four days.—General emaciation of body, and blood-vessels nearly all empty, excepting those of heart and lungs.—*Head*: Vessels of cranium, both external and internal, remarkably free from blood. Slight infiltration of pia mater, and a few drachms of serum in ventricles.—*Abdomen*: About five or six pints of dropsical fluid in peritoneal cavity; viscera nearly bloodless; uterus somewhat enlarged, hard, and partially, yet firmly, adherent to surrounding parts. Substance schirrous; neck and portion of cervix destroyed by ulceration, the immediately adjoining part being softened and vascular. Fimbriated openings of Fallopian tubes completely closed by firm adhesions to broad ligaments, tubes being dilated and filled with fluid. Left ovary changed into cyst, size of an orange, and contained fluid of watery consistence.

No. 36.—M., æt. 50. In hospital eleven days.—*Head*: Dura mater adhered firmly to skull-cap. Slight milky white opacity of arachnoid, along line of superior longitudinal fissure; considerable effusion of clear fluid into pia mater. Ventricles contained about an ounce of limpid serum; cerebral substance firm, and white coloured.—*Chest*: A few old adhesions in upper part of left lung, connecting opposed surfaces of pleuræ.

No. 37. M., æt. 62.—In hospital fifteen days. *Head*: Vessels of brain and membranes all extremely tinged. Dura mater firmly adherent, and torn on detaching skull-cap. Arachnoid of cerebral hemispheres slightly thickened, and of milky whiteness, for about three inches on each side of great longitudinal fissure.—*Chest*: Heart large, so that pericardium was in immediate contact with front of thorax for at least two inches.—*Abdomen*: old adhesions to considerable extent, in form of elongated threads and plates, with an almost cellular appearance, between concavities of liver, gall-bladder, and neighbouring organs; also in and above pelvis.

No. 38.—M., æt. 56. In hospital nine months.—*Head*: Skull-cap heavy; and internal surface irregular, as if from increased deposition, particularly in central portions of frontal and parietal bones; although without abnormal appearance of bony substance itself. Arachnoid thickened and opaque over hemispheres, as also fissura Sylvii. Pia mater infiltrated. About two ounces of perfectly pellucid fluid in each lateral ventricle.—*Chest*: Left lung irregularly

puckered, and partially consolidated at apex, where organ adhered to cavity. Consolidation extended partially into substance for about an inch. Slight old adhesions of right lung: inferior lobe being in conjunctive state of pneumonia, with partial consolidation.

No. 39.—M., æt. 49. In hospital three weeks.—*Head*: Dura mater adhered so firmly to bone, that shreds were torn off upon separation of skull-cap. Cranial bones thick, heavy, and of dark colour, vessels being full of blood. In arachnoid several opaque white spots, but membrane generally transparent. Vessels of pia mater distended with blood, presenting, on surface of brain, a closely woven pink-coloured network. Cerebral substance firm; bloody spots upon cut surface large and numerous; and ventricles contained about an ounce of limpid fluid.—*Chest*: Right lung connected to parietes by old adhesions at apex; over upper portion, a long irregularly depressed part, hard, and of dark colour, resembling a cicatrix, which measured full three inches in long diameter. Several masses of tubercle, and whole lung solid. Heart soft, easily torn, and exhibited fatty degeneration of muscular fibres.

No. 40.—F., æt. 50. In hospital six months.—*Head*: Dura mater pearl-coloured and bloodless. Arachnoid clear and transparent; considerable effusion of limpid fluid in pia mater, between convolutions of brain, which were shrunk and atrophied. Ventricles contained about an ounce of limpid serum.—*Chest*: Old adhesions of pleuræ.—*Abdomen*: Mucous membrane of intestines inflamed, and blackish brown from extravasated blood; walls of canal thickened, soft, dark coloured, and contained cicatrices.

(To be continued.)

ON THE CONNEXION BETWEEN MORBID PHYSICAL AND RELIGIOUS PHENOMENA.

NO. I. OF A SERIES.

BY THE REV. J. F. DENHAM, M.A., F.R.S., &c.

It is a received medical opinion that all bodily diseases affect the mind, that is, cause a change to some degree and extent or other of its perceptions, feelings, &c., and the mode whereby this change is produced is well ascertained, and level to every one's apprehension. Thus, the brain is the material organ or instrument of the mind, and upon its healthy state the mind depends for its correct action. It is itself liable to diseases, it sympathizes with any diseased part through its nervous connexion with it. It is extremely sensitive to the abnormal qualities, velocity, &c. of the blood produced by many diseases, and to any chemical and mechanical affections of the nerves, especially of the stomach and other digestive organs. It would seem highly reasonable to expect that the changes thus produced by bodily causes on the mind would extend to its religious phenomena; and this probability is often alluded to in the writings of the most learned and pious divines, who also advert to the necessity of taking it into consideration in judging of spiritual maladies, and of paying practical regard to it in the treatment of such maladies.

The following observations upon the subject are the results of an attention paid to it throughout a long and diversified clerical experience, aided by such an acquaintance with the best medical works as was compatible with my more directly professional duties and studies. My plan of observing has been to ascertain the nature of the disease in the sick cases to which I have been called to minister, if possible, from the medical attendant; and to make memoranda of the spiritual phenomena by which it was accompanied in its various stages. In now, however, communicating the results of my observations and reading, no *recognizable* use will be made of any particular cases that have come under my notice.

In order to secure to my observations, as far as I am able, the benefits of precision and method, and which are peculiarly needed in the treatment of a subject supposed by many persons to involve something beyond mere *physical* causes, I beg to premise those definitions and principles which appear to me to be essential to the correct and useful examination of it.

First, in order to form any practical idea of the diseased phenomena of body or of mind, it is necessary to form such an idea of their healthy phenomena. "Pour connaître homme malade, il faut connaître homme sain."*

By healthy physical phenomena may be understood such as attend an adult body free from malformation and from structural and functional disease; and by healthy religious phenomena such as are displayed by the mind united to such a body, possessing the ordinary degree of ability, and which has received the usual amount of intellectual culture along with good moral training, and a correct and intelligent religious education; and the religious phenomena which may be expected in such an instance of "a sound mind in a sound body," would be characterized by that *medium* in which propriety of all kinds so usually consists; or by the *balance being preserved* between its intellectual, moral, and religious powers—especially between the judgment and the emotions—and particularly by the absence of unintelligent and disproportionate excitement; and evinced chiefly in the following qualities: neither insensible nor excitable, neither sceptical nor superstitious: doleful but not credulous: humility without abjectness, cheerfulness without elation, seriousness without despondency, devotion without enthusiasm; inclination to moral and religious improvement without spiritual pride or ambition: no intense attention to itself or to the minds of others; more impressed with the necessity of moral and religious duty than of an acquaintance with theories and abstractions. It is difficult of course, if not impossible, to give a perfect definition of healthy and diseased phenomena either of body or of mind; perhaps they are best referred to our instinctive ideal of them; or the reader may possibly find some exemplification of them in the instances of the more happy, useful, and respectable portion of his acquaintance; but the preceding description may sufficiently serve the purposes of a standard. Accordingly all physical and religious phenomena may be considered as morbid which deviate from that standard, and in proportion as they deviate from it.

2. By the connexion between morbid physical and religious phenomena is to be understood, not that every kind and degree of the former is attended by some kind or degree of the latter, but that no kind of the latter ever exists except in union with some kind of the former, more or less clearly marked.

3. I submit that the chief rules of philosophising, *Regulæ Philosophandi*, as established by Sir Isaac Newton, and which Hartley contends ought to be adhered to with equal rigour in our attempts to solve the phenomena of the mind,† may be legitimately as well as advantageously applied to our subject. (1.) That no more causes of phenomena are to be admitted than what are real and sufficient to explain appearances: (2.) That phenomena of the same sort are to be accounted for by the same cause.

With regard to the application of the first of these rules to our subject it may be remarked that "the reality" of morbid physical phenomena is unquestionable, and that their "sufficiency to explain" morbid religious phenomena is evinced by the following facts: that the latter are not greater in extent or variety than those morbid mental phenomena which are attributed and traced by medical writers to bodily diseases; that both these classes of mental phenomena equally begin, increase, decline, and terminate with bodily diseases; that such religious phenomena never exist without morbid mental phenomena of a more general character; and that when the nature of the disease and the

* Cabanis.

† Hartley on Man, ch. i. p. 1.

sex, age, temperament, and other circumstances of the patient are duly estimated, a tolerably accurate expectation may be formed of the religious phenomena his mind will exhibit. With regard to the application of the second of these rules to our subject it may be remarked that the religious phenomena we denominate as morbid are evidently "of the same sort" as diseased mental phenomena in general, with the sole and unimportant distinction that they involve religious ideas, feelings, &c., and therefore are to be referred to the same cause.

The application of the foregoing rules to the subject, liberates it from the question of Satanic or demoniacal agency, and exempts us from the necessity of inquiring whether, and how far, the inspired writers do, or do not, really teach, and as part of the revelation they were commissioned to divulge, that either Satan or the demons cause any alteration of the phenomena of the human mind, either indirectly by the infliction of those bodily diseases from which morbid mental phenomena including the religious naturally result, or by direct agency, or by taking advantage of the debility produced naturally by bodily disease on the mind to exert upon it their supernatural power. It might, however, seem worthy of remark, that the religious phenomena in question yield, in the majority of instances, to medical remedies along with those other morbid mental phenomena of a more general nature with which they are always more or less associated. But would any one maintain that infernal agency may be dislodged from the mind by medical prescriptions?

We conceive ourselves then left at liberty to consider the relation of morbid religious phenomena to secondary and proximate and consequently to physical causes, and we are authorized by the Divine Founder of the Gospel to speak of secondary and physical causes, in his large admission of them when he says, "the earth bringeth forth fruit of herself"* *αὐτομάτη ἡ γῆ* &c. It may also best comport with the views of those who consider the mind to be an absolutely pure intelligence, apart from all possible material qualities, to conceive of it as being itself incapable of infirmity, and to regard all mental infirmity, as it is called, as originating in the infirm state of the physical organ of the mind, that to use the words of Christ, "the spirit is indeed willing, but the flesh is weak."† To those also who think that the physical origin of abnormal religious phenomena is attended with sufficient probability, it will appear, perhaps, further recommended by the considerations that it is both simpler and less gloomy than that of infernal agency, and therefore more in accordance with the appearances of nature and the scriptural representations of the benevolence of Deity, and of his perfect supremacy over all the works of his hands. It also directs the attention of the spiritual physician, and indeed of all persons, to the restoration and the care of bodily health as the readiest means of removing or preventing morbid religious phenomena. The experience, indeed, of every one even for a single day, of the connexion between his bodily states and his ideas, will be sufficient, if attended to, to convince him of the practical value of our subject. It is not too much to say that ideas are developed by physical states of a nature correspondent to those states, if indeed they be not also originated by them, and that those ideas which are in the first instance addressed to the mind, affect the body, according to its healthy or diseased susceptibility, and, as thereby modified, react upon the mind.

As already intimated, the connexion between morbid physical and religious phenomena, is adverted to in the writings of the most eminent and exemplary divines, and especially those of them who had turned their attention to medical studies, or, who like Abp. Secker, Dr. Barrow, and many others, had originally received a medical education. From these writings admissions may be produced, of the modifying influence of organization and of physical causes, not only upon the religious and intellectual, but even the moral phenomena of

* Mark iv. 28.

† Matt. xxvi. 4.

human nature, commensurate with the largest demands made for them by modern pathologists. Thus Bishop Beveridge remarks, "Atheistic thoughts spring up in the fountain of the soul *only* when muddled with fleshly pleasures."* Dr. Barrow observes, "Credulity may spring from an airy complexion; suspiciousness hath its *birth* from an earthly temper of the body."† Reserving other quotations for the particular occasions for them which will be afforded by the future examination of specific classes of morbid religious phenomena, I shall now subjoin the following *general* confirmation of the foregoing definitions, principles, &c., derived from the works of Abp. Sharp. "We consist of two parts, a soul and a body, which though they are distinct substances are yet by the wonderful power of God so closely united that they do strongly affect one another. Though it be our minds, or our spirits, or our souls, properly, that can be said to think, or to reflect, or to perceive, or to remember, or to hope, or to fear, or to enjoy, and the like; yet *all* these operations are influenced by, and do receive a kind of tincture as I may say from that state and condition and plight, the body is in. For it is plain, by manifold experience, that our souls in this world cannot act at all without the help and ministry of the purer parts of our bodily substance; which purer parts, let them consist in what they will, the soul makes use of as her instruments in *all* her intellectual operations, and as these are well or ill disposed, so will *all* the acts of our minds proceed accordingly. The changes and various dispositions that we feel in ourselves proceed not so much from the soul, for the habits and dispositions of that are often, for all these varieties, the very same, but rather they are in a great measure, if not wholly, to be attributed to the variety of tempers that the body is subject to, which the soul cannot many times either prevent or alter. *Irresolution* and *doubtfulness* about the goodness or badness of actions, as fearing that if we act this way we sin, if we act the other way we sin likewise, do often render the minds of well-meaning persons very uneasy, even sometimes in such instances as another man, and he an honest man too, would find no difficulty at all in. It may, and doth sometimes happen, that this perplexity and scrupulosity about actions doth proceed from distemper and indisposition of body; and when it does so, it is a spice of religious melancholy, and which is a dejection of mind occasioned from the temperament, or most commonly from the distemperature of the body, accompanied with unreasonable frights or fears about our spiritual condition. There is none in mankind can live a more uncomfortable life than they also do who are often thus dejected and under such sad fears and perplexities as sometimes to think themselves the most miserable wretches that breathe. Nay, even at their death, when they stand in need of comfort most, yet now and then it happens that they cannot rid themselves of those frightful and dismal apprehensions . . . As for the devil, they neither give him opportunity, nor is he, I hope, ordinarily permitted to be so busy about them, as they are apt to imagine. No; I take it, that the principal causes and foundation of *all* their troubles lie in the ill habits of their bodies: the animal spirits, which the soul makes use of as her instruments in the performance of *all* her rational operations, are vitiated and disordered by fumes arising from hypochondriac affections, and *that* gives the first occasion to the disorder of their minds. That what I say is true, appears in this, namely, that those who are constantly and habitually thus troubled in mind, are known, by a great many symptoms, not only to be persons of a melancholy complexion, but also to be highly under the power of hypochondriac melancholy; and those that are not frequently under these troubles, but only sometimes, may observe of themselves that these troubles have usually come upon them, either upon some heavy cross and affliction that has befallen them, or some great sickness

* Private Thoughts, Art XI.

† Sermon IX.

of which they were not well recovered, or some other natural cause that hath put their bodies into some weakness or indisposition, and when that has been removed, they have been as well in their minds as before Two things are necessary to be done for the cure or removal of religious melancholy, namely, that the persons afflicted with it do take care of their bodies, that they be put into a better state of health and vigour, and freed from all hypochondriac fumes that do oppress them; and that they endeavour to get their minds truly informed about those matters of religion, from which their disease doth, as I may say, take a handle to vex and disturb them. To speak my thoughts freely, I must needs say that in many of these cases the physician's part is every whit as necessary, if not more, than that of the divine; for if the bodily indisposition was removed, most of the fears, and frights, and disturbances that happen upon a religious account would vanish of themselves; whereas, while the root of the disease, I mean that ill ferment of the blood and spirits, remains in the body, the most comfortable discourses that can be made to them about their spiritual condition, though to the bystanders that hear them they appear never so wise and rational, will often have little effect on them; or if they do give them some present ease and satisfaction, yet in a little time their troubles and fears return again, and are as impetuous as they were before. I know that many of these will not give credit to what I now say. A man, for instance, that is troubled with horrid blasphemous thoughts will think it strange that you should advise him, for the cure of sin, to make use of physick and exercise, and such other methods as are prescribed to valedudinary persons for the recovery of their health: why, saith he, I am well enough in body, I eat, I drink, I sleep; all my disease is in my mind: I would be rid of these wicked thoughts that do continually haunt and torment me, and what can physick or exercise contribute to that? I have need of a spiritual physician. And so far, indeed, he is in the right. A spiritual physician may do him some service, and give him some comfort by convincing him, if he be capable of it, that these thoughts of his, how wicked and blasphemous soever they are, shall do him no harm so long as he doth not consent unto them. But this is all he can do. He cannot, I doubt, put him into the way of getting rid of these thoughts, which is the main thing he desires; for that cannot be done but by the alteration of the state of his body, from the ill-disposition of which *all* these thoughts do arise. But now the man being ignorant of all this, and having no idea how his body should thus affect his soul, as to the making him think after this or that manner, which yet it certainly doth, cannot readily entertain any advices that are given him with relation to that, though yet he will find upon trial that it is from hence *only* that his cure can be perfected. . . . Why may we not ascribe all that inequality we find in our affections towards God and spiritual things *wholly* to the inequality of the temper of our bodies? Without doubt this is generally the cause of it. As long as we have these bodies about us, the best of men must expect these ebbs and flows of affection to the service of God, and that even when they are in good health; and, therefore, much more if it should be their misfortune to have their animal spirits depraved by hypochondriacal affections. . . . No man that has seriously attended to the working of his own mind but will experience that he hath often had very odd and extravagant thoughts come into his head on a sudden, and those vigorously enough impressed, without any occasion that he can give account of, where there has not been the least reason to suspect that the devil had any hand in infusing them: but, as there is great reason to believe they did purely and solely arise from the present temper and motion of his animal spirits, which accordingly as they move regularly or irregularly, more briskly or more slowly, have a power of exciting in the soul thoughts and fancies of a differing nature. And hence come all the extravagances of dreams, the odd flights and recoveries of those that are in feverish

distempers, and *likewise* the strange conceits and fancies of melancholy and hypochondriacal persons. It is not all persons that do complain of these wicked and blasphemous thoughts and other extravagant fancies, nor all good persons that are thus haunted, but chiefly those that are of a melancholy constitution—those of the devout sex, women, are more thus affected than the other sex. These that I speak of are grievously disturbed with odd, unreasonable—nay, sometimes impious phantasies, which are suggested to their minds, they do not know how, nor upon what occasion; but the more they strive against them still the more impetuously do they come into their heads; and then especially when they set themselves to the more solemn exercise of religion, and endeavour to be more than ordinarily devout, at these times, to be sure, they shall be most grievously tormented with them. What now shall we say to these things? I verily believe that, for the most part, they are wholly to be ascribed to the distemperature of our bodies, occasioned by hypochondriac vapours, or hysteric passions, or ill affections of our natural humours, and that the devil hath no hand in them. But if, after all this, any man will say that those thoughts do not take their rise wholly from bodily distempers, but that also the devil hath a hand in them—namely, thus far, that he takes advantages of those disorders in our humour, and by means thereof doth rather excite these thoughts in us, or impress them more vehemently upon us, which is, indeed, the common opinion of divines,—I say, if any one thinks this to be a better account of the matter, he may, for all me, enjoy his own sentiments; for I account religious melancholy, properly so called, to be as perfect a disease, and in some cases as incurable, as some other diseases incident to human bodies: but in most cases it is capable of cure; and in all cases it may receive great comfort, and relief, and abatement. *It concerns all these persons to look after their bodies, for upon the cure and health of them the cure and health of the mind doth, in a manner, all in all depend.*—*Casuistical Sermons*, I.—V., Vol. III. London, 1716.

To Correspondents.

OWING to the unexpected length of two of the articles preceding Dr. Webster's communication, we have been reluctantly compelled to defer the publication of several reviews, &c., now in type, until the next number of our Journal. We hope in that number to notice all the books, pamphlets, and periodicals, transmitted to us. Our analysis of the "Asylum Journal" is among the postponed articles. Dr. Jarvis's communication, forwarded to the Editor by the instruction of the Commissioners of Lunacy for the State of Massachusetts, U. S., America, has been received and will be attended to. The last three numbers of the "American Journal of Insanity" will be reviewed in our January number, with the French Annals of Medical Psychology.

The concluding part of the Editor's Lettsomian Lectures, "On Medico-legal Evidence in Cases of Insanity," will appear in our January number.

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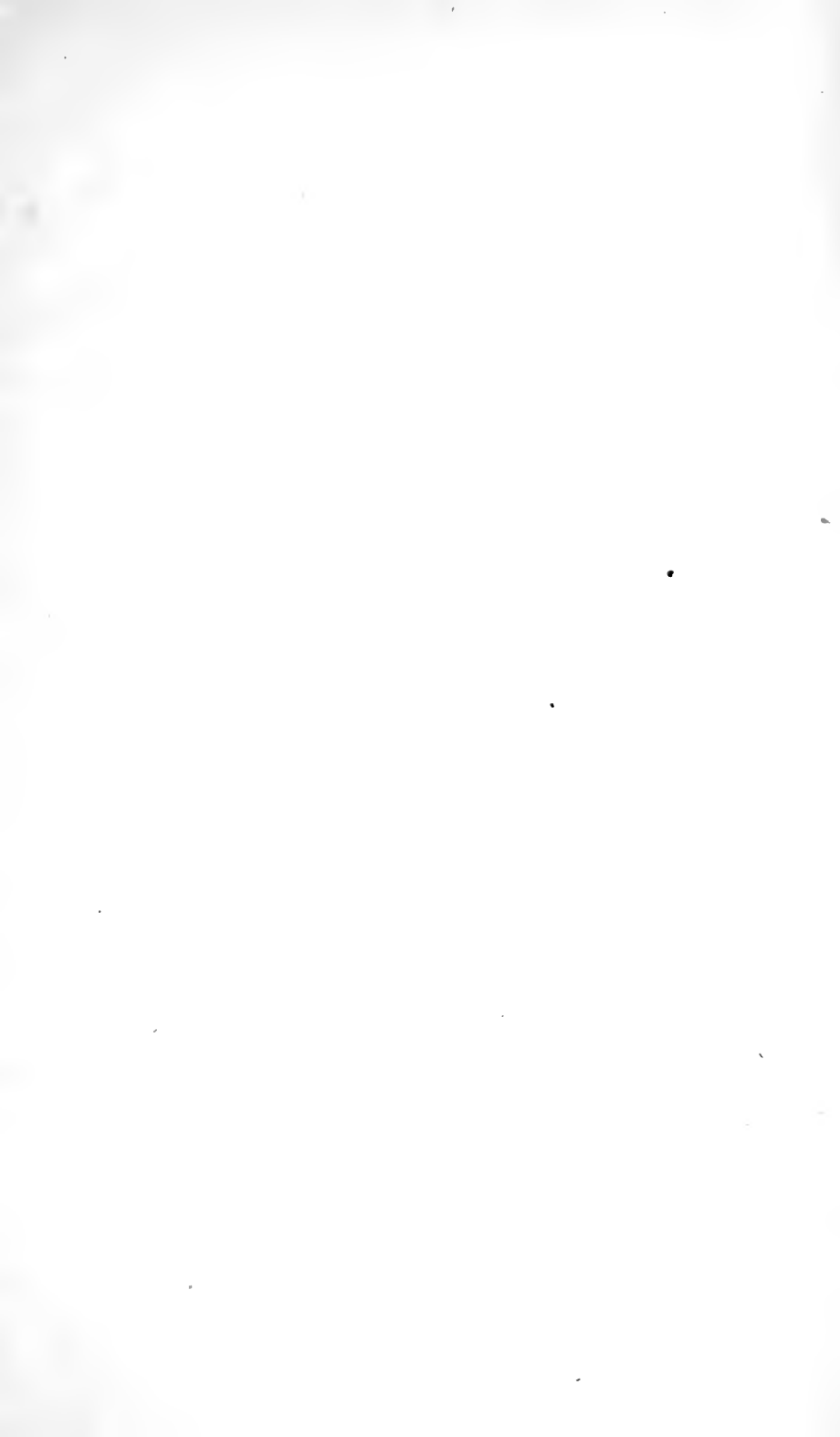
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